163 US 700

TRANSCRIPT OF RECORD.

163-700

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1891.

No. ~~1195.~~ 780 ~~502~~ ~~489~~ 24

24

E. T. POLLARD, APPELLANT,

vs.

THE BONSACK MACHINE COMPANY.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE WESTERN DISTRICT OF VIRGINIA.

FILED JUNE 2, 1891.

decision of the Circuit Court of Appeals is necessary to secure uniformity of decision.

But the defendant's petition does not show that any such conflict exists. On the contrary, it appears that the rulings of the Court are based upon prior decisions in similar cases, and are in accordance with such decisions.

We do not deem it necessary, upon this application, to discuss in detail the various alleged errors set out in the plaintiff's petition; they were all considered by the Court below upon two appeals, and decided adversely to the defendant's contention.

It clearly appears by the cases already cited that the purpose of the Act establishing Circuit Courts of Appeal was to relieve this court of the burden of many appeals. In view of the object and scope of this Act, and of the decisions of this Court interpreting it, no application for a writ of certiorari should be granted to review the final decision of the Circuit Court of Appeals unless the petitioner shows plainly that his case is of gravity and importance, or else that it is in the interest of uniformity of decision that his case should be reviewed.

We respectfully submit that the petitioner has failed to make out a case calling for the exercise of the discretion of this Court in his favor.

II.

The petition of the defendant for a writ of certiorari to the United States Circuit Court of Appeals for the Second Circuit should be denied.

Respectfully submitted.

HORACE E. DEMING,
JOSEPH G. DEANE,
Counsel to Plaintiff.

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1 UNITED STATES OF AMERICA, } ss:
Western District of Virginia, }

Pleas in the circuit court of the United States of America for the western district of Virginia, in the fourth circuit, before the Honorable Hugh L. Bond, judge of the circuit court of the United States for the fourth circuit, held at the court-rooms thereof, in the city of Lynchburg, on Saturday, the 14th day of February, anno Domini 1891, and in the year of the independence of the United States the 115th.

Be it remembered that heretofore, to wit, on the first day of November, in the year 1886, came Edward Pollard and filed his certain bill against the Bonsack Machine Company, which bill is in the words and figures following, to wit:

To the honorable the justices of the circuit court of the United States for the fourth circuit, within and for the western district of Virginia, in equity:

Edward T. Pollard, of the city of Richmond, county of Henrico, of the State of Virginia, a citizen of the United States, brings this his bill against the Bonsack Machine Company, a corporation existing and doing business under the laws of the State of Virginia, in the city of Lynchburg, county of Campbell, of the said State of Virginia.

And thereupon your orator complains and says that heretofore and before the 22nd day of July, 1884, your orator, being then a citizen of the United States, was the true, original, and first inventor or discoverer of a certain new and useful invention, to wit, an improvement in machines for the making of cigarettes, and that the said invention was not known or used by others before his invention or discovery thereof, and was not at the time of the application for letters patent therefor in public use or on sale with the consent or allowance of your orator, as the inventor or discoverer thereof, contrary to the provisions of the statutes of the United States in such case made and provided.

That, being such inventor, your orator made application in writing to the Commissioner of Patents of the United States for the granting of letters patent for said invention, and accompanied the same with a written description of the said invention or discovery and the manner and process of making and using the same in such full, clear, and exact terms as to enable any person skilled in the art or science to which the said invention or discovery appertains or with which it is most nearly connected to make and use the same, and with a specification of the parts and improvements and combination which he claimed as his invention, and with drawings and written references explaining the said invention or discovery and explaining the principle and the mode in which he contemplated the application of the principle by which it might be distinguished from other inventions; which said description was signed by your orator and attested by two witnesses and filed in the Patent Office.

That your orator made oath that he verily believed that he was then the original and first inventor and discoverer of the invention or discovery for which he then solicited a patent, and that he did not know or believe that the same was ever before known or
2 used; and also that he was then a citizen of the United States.

And your orator at the same time paid into the Treasury of the United States the sum of thirty dollars and received a receipt therefor, and then and there also duly complied in all other respects with all the necessary conditions and requirements of the statutes of the United States in such case made and provided prior to the granting of the letters patent hereinafter mentioned.

That on the 22nd day of July, 1884, letters patent of the United States, bearing date on that day, were issued to your orator according to law, whereby there was granted to him, his heirs or assigns, for the term of seventeen years from the twenty-second day of July, one thousand eight hundred and eighty-four, the exclusive right to make, use, and vend the said invention throughout the United States and the territories thereof, a description whereof was given in the words of your orator in the said schedule annexed to the said letters patent and was made part of the same.

And the said letters patent were issued in the name of the United States of America and were sealed with the seal of the Patent Office of the United States and were signed by the Secretary of the Interior and were countersigned by the Commissioner of Patents and were numbered 302,521 and were issued and delivered to your orator.

That thereupon, after the issuing of the said letters patent as aforesaid, your orator put the said invention into use by making and offering for sale to others said invention.

And your orator prays that said letters patent and the schedule annexed thereto as aforesaid may be deemed and taken as part of this his bill, and to the originals of which, or a duly authenticated copy thereof, now in your orator's possession and ready to be produced, he craves leave to refer.

And your orator has ever since the date of the said letters patent been and now is entitled to all the rights, interests, and privileges thereby secured unto him in and to the said invention or discovery in the said letters patent, and is and ever since the date thereof has been entitled to the exclusive use of the said invention and improvement.

And your orator further shows unto your honors that the said invention or discovery so patented as aforesaid unto your orator is of very great utility, and that the public have generally acquiesced in your orator's exclusive right to the same; and your orator would, but for the wrongful acts of the said defendant and others acting in concert with it, have made large gains, profits, and advantages from the manufacture, use, and sale of the said invention; and your orator would, but for the wrongful acts and doings of the said defendant and others acting in concert with it, now be enabled to use the said invention, to which he is entitled to the exclusive right as aforesaid, with profit and advantage, but that by the said wrongful acts and doings he is now prevented and hindered from so doing.

And your orator further shows unto your honors, upon information and belief, that the said defendant, well knowing the premises and the rights and privileges secured unto your orator, and in order to deprive him of the profits, benefits, and advantages which might and otherwise would have accrued unto your orator, at and within the said western district of Virginia, and without license or permission of your orator, the said defendant, The Bonsack Machine Company, has ever since the 22nd day of October, 1883, unlawfully and wrongfully made, or caused to be made, sold, or let out for hire on payment of a royalty, or caused to be sold or let out for hire
3 on payment of a royalty, used or caused to be used, sundry specimens of said apparatus and of machines which contained and employed substantially the invention covered by said letters patent, in infringement of the said exclusive rights secured to your orator by the letters patent aforesaid and granted to your orator, as hereinbefore set forth, and that the said defendant has derived and received and is still deriving and receiving from such use great gain and profits, but to what amount your orator is ignorant and cannot set forth, but your orator believes the same to be about the sum of, to wit, fifty thousand dollars, and so charges the fact to be, and prays that the defendant may be required to make a disclosure of all such gains and profits.

And your orator in like manner avers that the defendant, although requested to desist from such unlawful use and to pay your orator such gains and profits as the defendant has actually made, refuses so to do, by means whereof your orator is and has been greatly injured and is now prevented from putting the said invention or discovery into successful operation, and is deprived and prevented from receiving the gains and profits to which he is lawfully entitled from the exclusive rights and privileges so granted and secured to him as aforesaid, and which he would have derived and acquired and would now derive and acquire but for the said wrongful acts of the said defendant.

And your orator prays that the said defendant may be compelled by a decree of this honorable court to account for and pay over unto your orator all such gains and profits as have accrued or arisen to or been earned or received by the said defendant, and all such gains and profits as your orator would have received but for the wrongful acts and doings of the said defendant.

And that said defendant, its attorneys, solicitors, clerks, servants, agents, workmen, and all persons using said invention of your orator under or by virtue of any contract from or with said defendant may be perpetually enjoined and restrained by the decree of this court from directly or indirectly making or causing to be made, using or causing to be used, or vending to others to be used in any manner any machines containing or embodying the said invention granted by the said letters patent as issued and from infringing upon or violating the said letters patent by the use or sale of the said machines in any way whatever, and that all such infringing machines may be forthwith destroyed or delivered up to your orator, and that the said defendant may be decreed to pay the costs of this suit, and

that your orator may have such other relief as the equity of the case may require and as to your honors may seem meet.

To the end, therefore, that the said defendant may, if it can, show why your orator should not have the relief hereby prayed, and may full, true, direct, and perfect answer make, according to the best of its, its clerks, agents, or workmen's knowledge, remembrance, information, and belief, to the several matters hereinbefore aver-ed and set forth as fully and particularly as if the same were here repeated paragraph by paragraph and it and they thereto severally and specifically interrogated, and especially that said defendant answer and set forth—

First. Whether said defendant has at any time, and, if so, where and when, made, sold, used, let out on hire on payment of a royalty, or caused to be made, sold, used, or hired out on payment of a royalty any cigarette machine or machines for making cigarettes having therein a tube with two converging guides, as and for the purpose described in said letters patent; or, if the tube or apparatus used in said cigarette machines made, sold, used, or so let out for hire on payment of a royalty differed from that described in said letters patent, in what particulars it differed therefrom, or in
4 what respect it was differently applied or combined from that described in said letters patent, if at all.

Second. Whether said defendant has at any time, and, if so, where and when, made, sold, or let out on payment of a royalty or used a tube in a cigarette machine or machines for making cigarettes substantially as and for the purpose described in said letters patent; and if said defendant has made or used such apparatus or machines which contained and employed substantially the invention covered by said letters patent, how many of such apparatus or machines it so made or caused to be made and how many it has used or caused to be used, and by whom the same are now used, and how long the same have been used.

Third. Whether the apparatus or tube in the cigarette machines now in use by the said defendant or by parties to whom said defendant has sold, assigned, or rented out cigarette machines was and is not substantially similar to the apparatus described in said letters patent; and, if not, how the same differs therefrom.

Fourth. Whether the defendant has not made large gains and profits from the use of cigarette machines containing tubes such as that described in said letters patent; and, if so, to what amount.

May it please your honors to grant to your orator a writ of *subpœna ad respondendum*, issuing out of and under the seal of this honorable court, directed to said defendant, commanding said defendant to appear and make answer to this bill of complaint, and to perform and abide by such order and decree herein as may seem required by the principles of equity and good conscience.

And your orator will ever pray, &c.

EDWARD T. POLLARD.

JOHN DUNLOP &
KEAN & KEAN,
Complainant's Solicitors.

NOTE.—The defendant is required to answer the interrogatories numbered respectively first, second, third, fourth.

UNITED STATES OF AMERICA, }
Eastern District of Virginia, City of Richmond, } *ss:*

On this 30th day of October, 1886, before me came Edward T. Pollard, to me personally known, who, being by me duly sworn, did depose and say that he is the complainant in the foregoing bill of complaint named, and that he has read the said bill subscribed by him and knows the contents thereof, and that the same is true of his own knowledge, except as to matters which are therein stated to be on information and belief, and to these matters he believes it to be true.

M. F. PLEASANTS,
U. S. Commissioner, East. Dist. of Virginia.

5 At another day, to wit, at rules held in the clerk's office of the circuit court of the United States for the western district of Virginia, at Lynchburg, on the 3rd day of February, 1887, the said defendant filed his answer to the said bill, which is in the words and figures as follows, to wit:

Answer of the Bonsack Machine Company.

The answer of the Bonsack Machine Company to a bill of complaint exhibited in the circuit court of the United States for the western district of Virginia, at Lynchburg, by Edward T. Pollard against this respondent.

Respondent, saving and reserving the right of all proper exceptions by demurrer or otherwise to the said bill for the insufficiency thereof and on account of the many errors therein contained, for answer thereto or to so much thereof as respondent is advised it is material for answer to be made, answering, says:

Respondent is the owner and operator of cigarette machines known as the Bonsack machine. This machine is composed of several hundred pieces, one of which is a die or tube-forming die usually called a tube which forms the paper wrapper into a tube around the tobacco filler, thus forming a continuous cigarette roll, which is cut by the machine into proper lengths for cigarettes.

The said machine is covered by patents number 184,207, dated 7 of November, 1876, issued to Thomas Jones and J. H. Darlington, assignees of Albert H. Hook (which said patent has been regularly assigned by the said Thomas Jones and J. H. Darlington to respondent, and respondent is the owner of the said letters patent) and by letters patent number 238,640, dated 8th of March, 1881, and number 247,795, dated 4th of October, 1881, issued to James A. Bonsack and duly assigned by the said James A. Bonsack to respondent, and by other patents issued and applied for.

Respondent would respectfully show that the letters patent first above named (known as the Hook patent) described a tube or die

(therein called a tube-forming die) through which a continuous paper ribbon is drawn, having at the same time a continuous roll of tobacco fed thereupon, the office of the die or tube being to form the paper wrapper into a tube around the tobacco, and the first claim in the said Hook patent is in the following words: "The method herein described of forming cigarette cylinders, consisting of drawing a ribbon through a tube-forming die and simultaneously feeding the tobacco upon the ribbon, the same being previously gummed and finally pasted as herein described." In the said Bonsack machine patent number 238,640 a particular form of tube or die is set out and claimed, which will be more clearly understood by an examination of the drawings of the tube, which drawings accompany the specifications with said patent. By reference to the said drawings it will be seen that the particular form of the die or tube described and claimed by said Bonsack had guides for an endless belt and also for the paper ribbon which forms the wrapper for a continuous cigarette roll; that one of the paper guides extends further along the tube than the other. The die or tube on which complainant appears to have obtained letters patent is exactly, in so far as complainant's claims are concerned, the die or tube described and claimed by said Bonsack, except that complainant claims an extension of the guide on the left side of the die.

Respondent submits that such a claim will be strickly construed. The complainant, having claimed a simple and specific alteration in a previously patented device, will be held strictly to his claim.

Respondent denies the allegations in complainant's bill that his so-called invention was any invention at all, and charges that it was error to have issued letters patent thereof. The complainant was employed by respondent to improve the die or tube. He was perfectly familiar with the Bonsack tube, and the extention of one of the guides so as to correspond with the other guide involved no new principle or invention, but was such simple mechanical change as has never been held by the courts of this country as patentable. For this reason respondent submits that complainant's said letters patent should be held as void.

6

Respondent denies the allegations in the complainant's bill that he, the complainant, was the "true, original, and first inventor or discoverer" of his so-called invention, and that the same "was not known or used by others before his invention or discovery thereof."

Respondent avers and will prove that more than two years before the so-called invention by the complainant, James A. Bonsack, residing then at Bonsack's, Va., the inventor of respondent's machine had made and used at Bonsack's, Va., a die or tube with both paper guides extended, exactly as described and claimed in the letters patent issued to complainant, and that the said Bonsack used the die or tube so made on his, now the respondent's, machine more than two years before complainant applied for his patent.

Respondent also denies the allegation in complainant's bill that the said so-called invention is "useful" or "is of very great utility."

While a die or tube so made could be gotten to do some work, it never worked well. It is very difficult to construct so as to work,

and cannot be adapted to different tobaccos and different conditions of the same tobacco. The paper guides frequently choke, and their spiral shape renders it very difficult to remove the tobacco from them, so that practically the said invention is of no value, and its use has been entirely abandoned and was so abandoned before the said letters patent were issued to complainant, and respondent submits that letters patent on a worthless — are void. Respondent further says that complainant's patent must be declared void because in both of his claims he claims a trough and paper guide, which were fully described and claimed and shown in the drawings in said Bonsack patent, number 238,640, and which were in use publicly long anterior to complainant's application for his so-called patent.

Respondent denies the allegation in complainant's bill that respondent is using or has been using since the 22nd day of October, 1883, the so-called invention of the complainant's. In further answering this allegation in the said bill respondent is advised, as above stated, that complainant not being the inventor of any original machine or process, but only, if anything, the invention of the extention of a paper guide which he has particularly set forth and claimed, his said claim, even if valid in other respects, can only be construed to cover exactly what it claims and no more, and certainly cannot cover anything which was substantially shown or claimed in prior patents. There was used by complainant himself on one or two of respondent's machines for a short time a tube or die with two paper guides, but those tubes had been thrown aside before said letters patent were issued to complainant, and respondent has never used such tubes since and never expects to use them.

Respondent says that the dies or tubes now on respondent's machines, and which have been used from a time anterior to the date of complainant's said letters patent, are entirely different from the dies or tubes described and claimed in the patent of complainant. The die or tube described and claimed by complainant had two spiral paper guides, which will be clearly seen by reference to the drawings. One of these guides, that extending on the left side of the tube (having the trough end of the tube next to you), is the so-called invention of the complainant, though it is just like the spiral guide on the opposite of the tube as described and claimed by said Bonsack. The die or tube now used by respondent consist- in the extention of the trough G, figure 8 in Bonsack's drawings with his patent No. 238,640, to the point X 20. Over this trough from
7 X 30 to X 20 (these figures being made by respondent for the purposes of this description) is inserted an elastic tongue, which is adjustable, and is so arranged as to permit both edges of the paper to entirely escape from the tube. The edges of this tongue forms supports for the protruding paper, the opposite sides of the paper being held to the edges of the tongue and finally drawn into the cylindrical tube on the left side at X 20, not by any paper guide, as in the complainant's patent, but by a cloth belt which surrounds the paper and forces its exposed edge into the cy-ndrical tube.

The specifications, claims, and drawings in complainant's patent show his invention to be a closed spiral paper guide. No such guide

exists in the dies or tubes used by respondent. By reference to the first claim in complainant's patent it will be seen that his extended paper guide is claimed as "passing in front of and up to a slit or opening formed along the line of said abutment to force the opposite edge of the wrapper under"--that is, into the cy-ndrical part of the tube. The second and only other claim is substantially the same. As above shown, the extention of this paper guide, as in the above-quoted words claimed, is all that complainant claims which was not claimed by said Bonsack in a prior patent, and respondent says that the dies or tubes used by respondent have no paper guide "passing in front of and up to a slit or opening formed along the line of said abutment to force the opposite edge of the wrapper under," but the dies or tubes used by the respondent have an elastic and adjustible tongue in and over an extended trough so arranged as to leave an open space between the edge of the tongue and the side of the trough, which space is not spiral, but is straight, through which openings the edges of the paper project from the tube, and the edge of the paper is not brought into the cylindrical part of the tube by any guide extending over "in front of and up to a slit or opening" to receive the paper, but is drawn into the cylindrical part of the tube by no guide whatever, but by a tape belt which surrounds the paper, extending from the edge of the paper on one side nearly to the edge on the other side.

Complainant's device is a spiral paper guide entirely closed, confining the edge of the paper to the guide and forcing it forward in a spiral direction up to, over, and in front of the opening in the cylindrical part of the die or tube for the purpose, as stated in his claims, of forcing the paper into the tube. The dies or tubes used by respondent have no such guide, nor have they any guide for any such purpose, but they have simply a straight open slot through which the edge of the paper entirely escapes from the die, and is finally drawn into the die or tube, not by any constructive guide whatever, but by a tape belt.

Respondent further says that the die or tube used by respondent involves principles which are new and different from that claimed by complainant.

The die or tube as claimed by him is inflexible and cannot be successfully used because of the different tobaccos and the different conditions of the same tobacco. The flesible, adjustable tongue inserted in the die or tube used by respondent in substitution for Bonsack and Pollard paper guides has no annalogy to the spiral paper guides, but the flexible and adjustable tongue used by respondent allows the edges of the paper to entirely escape from the tube and enables the operator of the machine to so change the tongue as to adapt it to the work in hand. When paper guides such as claimed by complainant are used they often become choked with tobacco, and, on account of the spiral course of the paper guides (and such paper guides as are claimed by complainant cannot be made otherwise than spiral), it is very difficult to remove the tobacco, and on these accounts a die or tube such as is claimed by complainant is worthless.

8 Respondent, further answering the said bill, says that the allegation therein contained that respondent has "unlawfully and wrongfully" and "without license or permission" of the complainant made and used his said so-called invention is not true.

Respondent, further answering this allegation, says that respondent's machines are covered by the said Hook and Bonsack patents, all of which were regularly issued under the laws of the United States, and are in full force and effect; that after the first machines were constructed one of them was placed in the cigarette factory of Mess. Allen & Ginter, in the city of Richmond. The said James A. Bonsack had gone to Europe, and during his absence the operator of the said machine in Richmond had great trouble with his machine because of the imperfections of the die or tube. Officers of respondent at once made inquiries for a man of such skill as could possibly overcome this difficulty. Mess. Peters & Flood, of Lynchburg, urged the employment of complainant. He had applied to them, especially to Mr. Peters, and urged him to get a position with respondent for him, assuring Mr. Peters that he could greatly aid in perfecting the machine, and Mess. Peters & Flood insisted that respondent should employ him; that he was a fine mechanic, and his inventive skill would be very servic-able to respondent. Mess. Peters & Flood were stockholders in respondent's company, and it was largely through their representations that complainant was employed, complainant also representing to respondent'- president that he had invented certain valuable machinery for working tobacco; that he was out of a job and would be glad to get employment with respondent, and assering respondent'- president that he could make a die or tube for respondent's machine which would work well. Respondent's president, D. B. Strouse, employed complainant, and met him in Richmond. There the tube or die was fully discussed between said Strouse and complainant. It was found that the die or tube on the machine (which had not been made by said Bonsack) had not separate guides for the paper and tape belt, as was necessary and as is shown in the drawings of Bonsack patent, and other defects were found in the tube or die. Complainant went with the said Strouse to the room of the latter, at Ford's hotel, where the said Strouse had the Bonsack patents and drawings, and much time was spent by said Strouse and complainant in discussing said drawings and other devices and suggestions as to the construction of a proper die or tube, and complainant declared that he could make for respondent a better tube than the Bonsack tube, and that if he did not make a die or tube that would work better than the Bonsack tube or die he would not charge respondent a cent. Complainant was told that his services were not wanted for nothing, and that the company would pay him a monthly salary, which was agreed upon between the said Strouse and complainant, the former being the president of the Bonsack Machine Company and having full power and authority to employ and discharge all employees of the company and having full direction of all the employees and affairs of the company. Complainant immediately set to work for respondent,

and was in the continual and uninterrupted employ and pay of respondent until about the 1st of November, 1884.

Complainant was then requested by the said Strouse to go to work at once on the die or tube and to make any and all changes which he, the complainant, might think necessary to the construction of a proper tube, and in the absence of the said Bonsack the said Strouse urged the complainant to do all possible to get up a tube that would give entire satisfaction; and the complainant assured the said Strouse that he could and would get up a die or tube for respondent's machine which would work well. In pursuance of this agreement complainant at once went to work to make a suitable die or tube. He was paid by respondent for all his work and experiments. All tools, mandrills, &c., which he bought or had made were paid
9 for by respondent, and all the material used by complainant was charged to and paid for by respondent, as the accounts therefor will show. Not only this, but it was then certainly understood by respondent's president and by the complainant that the latter was working solely for the benefit of respondent and not for himself, and that respondent should be the owner and have the use of any die or tube which complainant should make or devise, for to this end only was complainant employed by respondent. In proof of this respondent positively avers that, after complainant had made the tube as patented by him, the said Strouse was in Richmond, and examined the said die or tube and its working, and the complainant then and there told the said Strouse that in his, complainant's, judgment the respondent's company ought to obtain a patent on the changes he had made, and the said Strouse and complainant had a conversation relative to respondent's obtaining such patent, complainant in said conversation not once intimating that he had or claimed any right whatever to patent his so-called improvement for his benefit. Said Strouse told complainant that he did not think the change in the tube patentable, as he thought it covered no new principle. Shortly thereafter the complainant, being still and continuously in the employment and in the pay of respondent by the month, left respondent's work in Richmond and went to Washington city, without the knowledge or consent of respondent or any of its officers or agents, and applied for his so-called patent.

Respondent, hearing of this bad faith on the part of complainant, determined not to retain him in its employment unless he would sign an agreement not to set up any claim against respondent for improvements made by him, which agreement complainant signed, a copy of which is herewith filed and prayed to be considered a part of this answer. The original will be produced at any time if desired. This agreement being executed by complainant, he was continued in the employment of respond-nt.

In all fairness to the complainant respondent says that it was not intended by the said agreement to in any way effect the application which complainant had made for a patent, as it was wholly immaterial to respondent whether he obtained a patent or not, but the said contract clearly and expressly provides not only that respondent should have the benefit of his (complainant's) improvements, but

"that he" (the complainant) "will do nothing, directly or indirectly, which may at any time come in conflict in any way whatsoever with the interest of the said company" (the respondent) "or their assignees."

Further answering the said allegation in complainant's bill, respondent says that, having constructed three of its machines in this country and finding it at that time very difficult to have the work done here, respondent determined to have the machines built in Paris, and complainant went to Paris about the beginning of 1884 to superintend the construction of the first lot of machines ordered; and he was authorized and directed to make all alteratins and improvements which he thought best in the said machines; and in pursuance of this authority and of his undertaking he did superintend the construction of respondent's machine in Paris, and he did make a number of changes in the said machines, some of which proved beneficial but one of which was injurious and caused respondent to sustain much loss. Among the improvements so made which were beneficial was the new form or tube or die which he had made and put on the machines in Paris, and which is substantially the same tube used by respondent ever since and the same hereinbefore described, and which, as above shown, is wholly different from the device for which complainant procured his so-called patent. Respondent has never made or used any die or tube designed or made by complainant without his consent or license, but avers that the dies or tubes designed or made by complainant were designed and made for respondent; that complainant was employed to make the best tube and other devices for respondent's machines which his ingenuity could design, for which work and inventions respondent paid him his salary as agreed.

That these dies or tubes were put on respondent's machines by complainant himself; that the house in Paris which constructed respondent's machines was directed by complainant himself to make and furnish with all of respondent's machines the dies or tubes which respondent had used from that day to this (some trivial modifications having been since made). Respondent further says that complainant never in any way whatever objected to the use of these dies or tubes by respondent, nor demanded any reward whatever for their use, until the receipt by respondent of a letter by John Dunlop, Esqr., an attorney in the city of Richmond, which letter was dated on the 20th day of September, 1886.

Under the facts in this case respondent respectfully submits that respondent has license to use the said dies or tubes, regardless of any patent thereon, or any part thereof, granted or issued to complainant, and that such license is irrevokable; and, further, that a court of equity, upon a suit being instituted for that purpose, would compel complainant to assign his said patent to respondent.

Respondent further submits that complainant is estopped from instituting or prosecuting this suit by the plain and express terms of his said contract, as set out in the following words: "And that he will do nothing directly or indirectly which may at any time

come in conflict in any way whatsoever with the interest of the said company or its assignees."

Respondent, answering more specifically the first interrogatory in complainant's bill, says that complainant used for a short time on one or two of respondent's machines a tube or die having two paper guides substantially such as are described in the letters patent issued to complainant; that said tubes or dies were abandoned before the said letters patent were issued to complainant, and respondent has not made, sold, used, let out on hire or payment of a royalty, or caused to be made, used, sold, or hired out on payment of royalty, any cigarette machines having therein a tube or die having therein two converging guides as and for the purpose described in said letters patent. The die used in the machines of respondent is different from that described in the said letters patent issued to the complainant. His device is a spiral paper guide, entirely closed, confining the edge of the paper to the die and forcing it forward in a spiral direction up to, over, and in front of the opening in the cylindrical part of the die or tube, for the purpose, as stated in his claims in his said patent, of forcing the paper into the tube. The dies or tubes used by respondent have not such guides, nor have they any guide for any such purpose, but they have simply a straight open slot, through which the edge of the paper entirely escapes from the die and is finally drawn into the die or tube, not by any constructed die whatever, but by a tape belt.

In answer to the second interrogatory in complainant's bill, respondent says that except the tubes or dies used by complainant himself for a short time on one or two of respondent's machines, as stated in the answer of respondent to the first interrogatory, respondent has not made, sold, hired, or used, on any of its machines, any tube or die substantially as and for the purpose claimed in said letters patent.

Respondent, answering the third interrogatory in complainant's bill, says that the tubes or dies now used on respondent's cigarette machines, whether sold, assigned, or rented, are not substantially similar to the "apparatus" described in the complainant's said letters patent, but they differ therefrom, as set out in respondent's answer to the first interrogatory in complainant's bill.

Respondent having shown that complainant has no cause of action against respondent, nor any right *right* to prosecute his suit at all, respondent insists that complainant cannot demand any disclosure of the business of respondent, and therefore respectfully declines to answer the interrogatory propounded in complainant's bill relative to the business matters of the respondent.

11 Should the court at any time require such disclosures they will be promptly and fully made.

Copies of the specifications and drawings accompanying the three patents herein referred to, to wit, the Hook and two Bonsack patents, are herewith filed and prayed to be read as parts of this answer; the original letters patent will be produced if required. Respondent will also produce in support of this answer samples of the original tubes as described and claimed in the first patent issued to

James A. Bonsack, of the tube as described and claimed by complainant, and of the tubes now used by respondent.

And having answered the said bill as fully as respondent is advised it is material to answer, respondent prays that the said bill be dismissed and that a decree be entered against the complainant for respondent's costs.

[Seal Bonsack Machine Co., Salem, Va.]

BONSACK MACHINE CO.,
By D. B. STROUSE, *Att'y.*

This agreement, made this 27th day of December, 1883, between the Bonsack Machine Company and E. T. Pollard, witnesseth that, the said company having employed the said Pollard to set up, run, and improve the Bonsack cigarette machine in the United States and abroad, it is agreed that in consideration of the said employment that the said Pollard shall do all he can in every possible way to advance the interests of the said company, and that any improvements made by him on the said machine shall be wholly for the benefit of the said company, and that he will do nothing directly or indirectly which may at any time come in conflict in — way whatsoever with the interest of the said company or their assignees; and in consideration of the premises it is agreed that the said company shall pay to the said Pollard seventy-five dollars per month, and when he is sent out of the United States his actual railroad and ocean fares and his board bills and fifty dollars per month extra.

Witness the following signatures and seals this day and year first above written.

BONSACK MACHINE COMPANY. [SEAL.]
E. T. POLLARD. [SEAL.]

Witnesses:
E. SCHAEFER.
P. A. KRISE.

A copy.

JNO. J. MAYS,
Notary Public.

12 Circuit Court of the United States for the Western District of Virginia.

E. T. POLLARD, Complainant
vs.
THE BONSACK MACHINE COMPANY, Defendant. } In Equity.

Exceptions taken by the said complainant to the answer filed at the February rules, 1887, purporting to be the answer of the said defendant company to the said complainant's bill.

First. For that said answer is not properly or sufficiently verified.

Second. For that said answer appears to be the answer of D. B. Strouse, who is said therein to be the president of the defendant

company, but who is not impleaded or made a party in anywise by complainant's bill.

Third. For that the said answer, if it can be regarded as the answer of the defendant company at all, does not answer as to the special interrogatories of the said bill as therein set out and numbered, respectively, "first," "second," "third," and "fourth," but refuses to make answer thereto unless specially thereto ordered by the court.

In which particulars the said complainant excepts to the said answer as imperfect, insufficient, and evasive, and humbly prays that the said defendant may be required to put in a full and sufficient answer to the said bill of complaint.

JOHN DUNLOP,
Solicitor for Complainant.

(Endorsed:) Filed Feb'y 19th, 1887. W. M. Elliott, clerk.

Order. Entered March 7th, 1887.

At another day, to wit, in the clerk's office of the circuit court of the United States for the western district of Virginia, at Lynchburg, at rules, to wit, on Monday, the 7th day of March, 1887.

In pursuance to equity rule 63 the following order was this day entered of record, to wit:

EDWARD T. POLLARD
vs.
THE BONSACK MACHINE COMPANY.

Exceptions for insufficiency having been filed to the answer of the said defendant company on the 19th day of February, 1887, and the said defendant company having not submitted to answer the said exceptions, on motion of Kean & Kean, solicitors for complainant, it is ordered that said exceptions be set down for hearing at the next regular term of this court before the Honorable Hugh L. Bond, judge of said court in term.

Teste: WYATT M. ELLIOTT, *Clerk.*

Opinion of the Court.

EDWARD T. POLLARD
vs.
THE BONSACK MACHINE COMPANY.
} Exceptions to Answer.

First. Answer not properly verified. Sustained.

Second. (See exceptions.) Must be overruled. It is not the answer of D. B. Strouse, but that of the defendant company. Strouse, the president, is referred to as its agent, by whom certain trans-
13 actions were had with the complainant.

Third. As to exception to the answer for failure, &c., the 1st, 2nd, and 3rd interrogatories is sustained; while the interrogatories are substantially answered in the general allegations and statements of

the answer, they should be specifically answered, affirmatively or negatively.

As to the 4th interrogatory, the exceptions must be overruled. The answer that the respondent denies that the invention claimed by the complainant is patentable, and, if patentable, it is denies that it has ever infringed said patent by use, sale, or otherwise; that it had an agreement with complainant that whatever improvement he made on the machine was for defendant's benefit.

It would, therefore, in the opinion of the court be premature to require the respondent to disclose the profits and gains it has made out of its own machine, at least until the complainant has made out a *prima facie* case of infringement.

Answer amended as heretofore copied & refiled Ap'l 2nd, 1887.

Replication.

At another day, to wit, in the clerk's office of the circuit court of the United States for the western district of Virginia, at Lynchburg, at rules, to wit, on the 4th day of April, 1887.

The following replication was this day filed in said office and entered of record, to wit:

E. T. POLLARD
vs.
THE BONSACK MACHINE COMPANY.

The replication of the said E. T. Pollard to the answer of the said defendant.

This repliant, saving to himself the benefit of all exceptions to said answer for its manifold insufficiencies, for replication thereto says that he will aver and prove his said bill to be true, certain, and sufficient in law, and that the said answer is untrue, insufficient, and uncertain; without this, that any other matter in said answer not herein replied to, confessed or avoided, traversed or denied, is true.

And he prays as *and* in his said bill he has already prayed.

14 *Deposition of E. T. Pollard for Plaintiff.*

In the United States Circuit Court for the Western District of Virginia.

E. T. POLLARD
vs.
THE BONSACK MACHINE COMPANY. } In Equity.

To the Honorable Hugh L. Bond, judge, &c.:

E. T. Pollard, complainant in the above-entitled cause, prays your honor to appoint D. Rand. Wellford, residing in Richmond, Virginia, special examiner to take testimony in the above-entitled cause,

on behalf of the said E. T. Pollard, in the said city of Richmond, and he will ever pray, &c.

KEAN & KEAN,
Solicitors for Pollard.

Ordered by the court this 5th day of May, 1887, that B. Rand. Wellford be, and he is hereby, appointed a special examiner in the above cause to take testimony of witnesses to be produced before him in Richmond, Virginia, on behalf of E. T. Pollard, pursuant to equity rules 67 and 69.

HUGH L. BOND, *Cr. Judge.*

To the Bonsack Machine Company:

Take notice that I shall proceed on Thursday, the 17th day of May, 1887, at the law office of John Dunlop, Esqr., 1003 Bank street, Richmond, Virginia, to take the depositions of myself, Milton Coyce, Simon Burnets, Daniel Hughes, Henry Gibbs, and John Pope, and others, to be read as evidence on my behalf, in a certain suit in equity depending in the circuit court of the United States for the western district of Virginia, at Lynchburg, in which I am plaintiff and said Bonsack Machine Company is defendant. The taking of said depositions will be begun at 10 o'clock a. m. on said day and between that hour and 6 o'clock p. m., and will be continued from day to day between said hours until complete.

E. T. POLLARD,
By KEAN & KEAN AND JOHN DUNLOP,
His Attorneys.

April 30th, 1887.

Henry S. Shaver makes affidavit of service of the above notice on D. B. Strouse, president of said company, on 3rd day of May, 1887.

The deposition of E. T. Pollard and others, taken before me, B. Rand. Wellford, a notary public for the city of Richmond, in the State of Virginia, at office of John Dunlop, 1003 Bank street, in said city, this the 17th day of May, 1887, to be read as evidence in behalf of E. T. Pollard, in suit now depending in the circuit court of the United States for the western district of Virginia, wherein said E. T. Pollard is plaintiff and The Bonsack Machine Co. is defendant, in pursuance of notice hereto annexed.

Present: John Dunlop, attorney for E. T. Pollard; D. B. Strouse, for company.

The witness E. T. POLLARD, having duly sworn, deposes as follows:

1st question by JOHN DUNLOP, counsel for the plaintiff. What is your name, age, and residence?

Answer. Edward T. Pollard; 38 years; reside 704 E. Marshall street, Richmond, Virginia.

2nd question by same. Are you the plaintiff in this suit?

15 Answer. Yes, sir; I am the plaintiff.

3rd question by same. Are you acquainted with The Bonsack Machine Co., the defendant in this suit?

Answer. Yes, sir.

4th question by same. Do you know Mr. D. B. Strouse, the president of that company?

Answer. Yes, sir.

5th question by same. Were you ever employed by that company?

Answer. Yes, sir; I was employed.

6th question by same. When were you employed by that company first, and where were you then residing?

Answer. I think it was about the 15th of June, 1883—between the 15th and 20th. I commenced in their employment on the 26th of June. I then resided in Lynchburg, Va.

7th question by same. By whom were you engaged in the employment of that company?

Answer. By Mr. D. B. Strouse, the president.

8th question by same. Did you know Mr. D. B. Strouse before that time?

Answer. No sir. I was introduced to him by Mr. Thurman, from Lynchburg, at the time I was engaged by the company. Mr. Thurman sent for me to come to his shop, and introduced me to Mr. Strouse, and told me Mr. Strouse wanted to employ some one to run his cigarette machine in Richmond, which was then at the factory of Allen & Ginter. About a month before Mr. Thurman said the Bonsack Co. wanted to get him. He couldn't accept the place and asked me if I would take it. I told him I would take the place if they would pay me enough.

9th question by same. What was the contract, if any, entered into between you and the Bonsack Machine Company; and, if any, was it in writing or a verbal contract?

Answer. There was an agreement; it was verbal. The agreement was that Mr. Strouse, Mr. Thurman, and myself were to meet here in Richmond on the 25th of June, 1883. Mr. Thurman was to make two or three tubes and bring — with him. Then after Thurman had staid with me two or three days, if I could run the machine, the Bonsack Co. would pay me $75.00 a month. If I did not run it, I was to pay my own expenses and get nothing. This agreement was made in Thurman's presence.

10th question by same. Did Mr. Strouse and Mr. Thurman come to Richmond according to that agreement?

Answer. Yes, sir; they met me in Richmond.

11th question by same. How long did they stay in Richmond at that time?

Answer. Mr. Thurman stayed two or three days. Mr. Strouse staid a day or so longer. Thurman said when he was here two or three days that I could handle the machine as well as he could, and it was not necessary for him to stay longer.

12th question by same. How did that machine run when Mr. Thurman and Mr. Strouse were here?

Answer. It didn't run well—that is, it did not make good work. Allen & Ginter would not have the cigarettes that were made on the machine. A great proportion of the cigarette filler had to be broken off, and we called it trash. Mr. Strouse told me that the machine was in perfect order and the difficulty they had had was in the man and not in the machine. Mr. Strouse told me that the machine had been ordered away on account of the bad work. Allen & Ginter would not have the work they were making before I went there.

13th question by same. Did Allen & Ginter complain of the machine when Mr. Strouse and Mr. Thurman were with you or not?

Answer. I don't know whether they complained. Mr. Pope spoke to Mr. Strouse when he had anything to say in regard to it. After Mr. Strouse left, Mr. Pope came to me and asked me if the machine was all right and if that was the kind of cigarettes they expected to make. I told him that I supposed that the machine was all right as far as I knew. Then he told me to stop work; that he
16 would not have the cigarettes I was making; that it was just wasting his tobacco. Then I asked what was wrong with the cigarettes. He told me that they were square, irregularly filled, and that the paper was too loose for the tobacco; that the tobacco would slip out of the paper in handling the cigarettes. He brought me in a box that he had shipped and that had been sent back to him, and said that there was a great loss in packing and stamping the cigarettes, besides the waste of tobacco, as the cigarettes had to be burnt. After he explained to me the kind of cigarettes he wanted I asked him if he would let the machine stay there a short while; that I could make a tube that would make cigarettes such as he wanted. He said that the machine might stay a week or so if I was positive I could make a tube that would make a round, smooth cigarette, but that he was tired of the machine wasting his tobacco as it had done and would not stand it.

14th question by same. Who was Mr. Pope, mentioned by you?

Answer. Mr. Jno. Pope was and is one of the firm of Allen & Ginter and has full management of all the factory.

15th question by same. Was he a member of that firm and had he such management at the time you went there?

Answer. Yes, sir.

16th question by same. How long after Mr. Strouse left Richmond in June, 1883, did Mr. Pope make these complaints of the machine?

Answer. I don't remember how long, but it was the first time Mr. Pope had said anything to me at all about the machine. It might have been the same day or a day or two later.

17th question by same. Look at these papers from the United States Patent Office, marked Exhibit "A," purporting to be copies of letters patent dated 7th November, 1876, issued to Jones and Darlington, assignees of Albert H. Hook; Exhibit "B," purporting to be copies of letters patent No. 238,640, dated March 8th, 1881, issued

to James A. Bonsack, and Exhibit "C," purporting to be copies of letters patent No. 247,795, dated October 4th, 1881, issued to said James A. Bonsack, and say whether the tube or tubes used in the machine at Allen & Ginter's in June, 1883, which you were employed to handle corresponded to any of the one or more of the tubes described in any one of the said Exhibits "A," "B," and "C."

Answer. There is nothing in the discription of Exhibit "A" that resembles it in any way except the paper fastened through the tube. Figure 8 in Exhibit "B," described as "wrapping tube," is exactly the same discription as tube used in machine at that time. It was made from the specifications of this tube, figure 8, I suppose. There was no tube used as compressing tube; it had been substituted by a patent issued to James A. Bonsack, described in Exhibit "C" as "converging throat"—I should have said "converging trough"—consisting of three steel belts and presser wheel and two back strips.

18th question by same. In that machine at that time at Allen & Ginter's was the compressing trough mentioned in Exhibit "C" substituted for the compressing tube mentioned in Exhibit "B," figure 5, or not; or was that compressing trough in addition to that compressing tube mentioned in said Exhibit "B"?

Answer. It was used as an improvement on the compressing tube and in the place of it.

19th question by same. By whom was the "wrapper tube" on that machine in June, 1883, made?

Answer. It was made by Robert Thurman, the man above mentioned.

20th question by same. How many tubes were then used on that machine when you took chaege in June, 1883?

Answer. There was only — tube used.

21st question by same. Are you acquainted with the Bonsack machines now used in Allen & Ginter's?

Answer. Yes, sir; I am acquainted with them. I see them every day. I have charge of all the machinery used in the factory belonging to Allen & Ginter. I have nothing to do with the
17 Bonsack machines; they *they* furnished their own men to look after their own machines. I mean the Bonsack Co.

22nd question by same. Look at said Exhibits "A," "B," and "C" and say whether or not the tubes now used in the Bonsack machines now in Allen & Ginter's correspond with any tube mentioned in those exhibits.

Answer. No, sir; there are none — those tubes used.

23rd question by same. Were you engaged by the Bonsack Co. for any purpose than to run their machine or not?

Answer. No, sir; I was engaged to run the machine at Allen & Ginter'.

24th question by same. When you were so engaged was there or was there not any talk between you and the Bonsack Machine Co. or its president about any improvements being required on the Bonsack cigarette machine or not?

Answer. No, sir; there was no such talk between me and the president or any members of the company. Mr. Strouse, the presi-

dent, told me the machine was all right; the trouble had been in the man who had been running it and not in the machine.

25th question by same. Do you know who ran it before you went there?

Answer. Mr. Strouse told me a man by the name of Foutz ran it.

26th question by same. Look at Exhibit "D," purporting to be letters patent of the United States of America to Edward T. Pollard for a new and useful improvement in cigarette machines, dated July 22nd, 1884, or on application filed September 14th, 1883, and say whether you are the Edward T. Pollard therein mentioned as the patentee.

Answer. Yes, sir; I am that Edward T. Pollard.

27th question by same. Look again at said letters patent last named and say whether or not the tubes now used in the Bonsack machines at Allen & Ginter's are like the tube described in said letters patent issued to you.

Answer. Yes, sir; they are the same tubes made by the specifications of my patent. There is no change whatever in the principle of the description given in my patent in anything that I claim as an improvement.

28th question by same. How many Bonsack machines are there at Allen and Ginter's?

Answer. There are five now there.

29th question by same. Did you ever examine these tubes now in use or that have been in use in those machines since Sept., 1883, to see by whom they were made?

Answer. Yes, sir.

30th question by same. By whom were they, at any time, made since September, 1883?

Answer. They were made by Robert W. Thurman, of the firm of Thurman & Lyman—I think his name was Lyman; he is now dead—in Lynchburg, Va. They are now made by some man in Salem, Va., who only puts P. S. B. on tube and number of tubes.

31st question by same. Have the Bonsack machines now at Allen & Ginter's a trough corresponding exactly to that described in Exhibit "C" by Mr. Bonsack as follows "My invention consists," &c., from line 40 to 49 on page 3 of Exhibit "C"?

Answer. No, sir; there is no such compressing trough in use; the filler is not compressed before entering the tube. The compresser wheel has been removed from line described "y" in figure 3 of patent 247,795, Exhibit "C," and set in line with pull-ys "f^4" and "f^6," and the strips that form the trough are now straight; the three steel belts and compressing wheel are not used as a compressing trough, but used as a conductor to carry the loose tobacco from the feed hop-er to the trough of the tube.

32nd question by same. In answer to the 13th question you said that you told Mr. Pope that you could make a tube to make cigarettes such as he wanted; did you make such a tube?

18 Answer. Yes, sir; I made a tube that made work that he said he was satisfied with.

33rd question by same. When did you make that tube?

Answer. I made it along about the 1st of July, 1883. I was some week or so, or more than that, getting it perfect, as I had to make it after stopping time at the factory. The Bonsack Company required the machines run every day, and that I should report what work I done every night. If it didn't run I had to s-ate why it didn't run.

34th question by same. Did you ever tell Mr. Strouse that Mr. Pope told you to stop making cigarettes?

Answer. I think that I wrote to Mr. *w*trouse or P. A. Krise, the secretary and treasurer of the Co., to whom I made my reports, that Mr. Pope complained of the work, and said it would have to stop if we didn't make better work. I think I sent Mr. Krise samples of the work; my instructions were to send him samples every week.

35th question by same. Are you acquainted with P. A. Krise's handwriting?

Answer. Yes, sir.

—. Look at Exhibit P. A. K. No. 1, July 21st, 1883, and say whether or nor it is in his handwriting, and say whether you received it from him?

Answer. Yes, sir; it is in his handwriting; I received it from him.

37th question by same. Are the complaints mentioned therein by Mr. Krise of the cigarettes what you mean by the word "trash" as used before by you or not?

Answer. No, sir; it is not. What he means by being to- tight was caused by the irregular feeding of the machine; that was the sample of the work proposed to be packed. What I called "trash" were long cigarettes that had to be torn off before entering the knife to be cut in lengths; that was torn off on account of its not being pasted or so wrinkled or torn that it wouldn't support itself to the point where it had to be cut in into cigarette lengths.

38th question by *sma*e. What was torn or wrinkled?

Answer. What we called the cigarette roll.

39th question by same. Was it the paper or tobacco or both that were wrinkled or torn?

Answer. It was the paper that was wrinkled or torn or unpasted.

40th question by same. Are you a machinist?

Answer. Yes, sir.

41st question by same. Can you, from mere knowledge of that machine, say which side of the paper in the wrapper tube or after it passed out of the wrapper tube was torn or which side was wrinkled?

Answer. It was torn or wrinkled while passing through the tube Looking at the tube as described in patent 238,640, Exhibit "B,' holding the paper with large end of tube to you, the paper on the left-hand side as passing thro' the tube was wrinkled, because there was nothing to protect it from the tobacco, no gro-ves nor guide; consequently it was wrinkled and would not go round the tobacco filler, and the papers would not come together and could not be pasted. The paper was torn on the right-hand side. The cause was that it had a longer distance to travel because of the spiral gro-ve, as described in figure 8, Exhibit "B."

41st question by same. In answer to the 31st question you say that now in the Bonsack machine at Allen & Ginter's there is not the compressing trough described in letters patent 247,795, Exhibit "C," and that the compressing wheel has been removed from the line described by "*y*" in figure 3 of said patent and set in the line with pulleys f^4 and f^6 of said figure 3. By whom were these changes made?

Answer. I made those changes.

42nd question by same. In said patent 247,795, Exhibit "C," page 2, line 120 to 125, inclusive, it is said: "At the point *a*, where two sides of the trough are parallel, a disk or wheel h^2 is arranged, which wheel exactly fits between the sides of the trough, and has a straight or square periphery that forces the tobacco down to cause it to be compressed into an appropriately square filler." Did that wheel force the tobacco down to cause it to be compressed into a sqare filler or not after you removed it into a line with f^4 & f^6 of said figure 3?

Answer. No, sir; the tobacco is not compressed until it enters the tube. The wheel is used as a guide to smooth the top of the tobacco and is run loos-ly on the tobacco. It does not fit tightly beteen the belts as described in said figure 3.

43rd question by same. Was it necessary to press the filler or not before it entered the Bonsack wrapper tube?

Answer. Yes, sir; it had to be pressed to less than half the size, so as to pass through the tube without touching the unprotected edge of the paper.

44th question by same. Could the Bonsack wrapper tube be used without his compressing tube or compressing trough?

Answer. No, sir; it could not. It had to be pressed before entering the wrapper tube.

45th question by same. You said that you made your improved tube in July, 1883, your letter of application for patent is filed 14th September, 1883. Why did you delay so long to apply for your patent?

Answer. I was working on the tube to get it perfect and getting up the specifications of the tube. I went to Washington on the 5th of September to make application. Notingham and myself examined the Bonsack and Hook cigarette machines and several others. He was from the 5th until the 14th preparing the drawings and specifications. He was my attorney.

46th question by same. Did you leave your work at that time at Allen & Ginter's to go to Washington?

Answer. I left Mr. Gibbs in charge of the machine at Allen & Ginter's. I was at that time making the changes in the feed of the machine.

47th question by same. What changes were you making in the gearing and feeding?

Answer. I changed the whole feeding apparatus of the machine, made it so as to make a regular filled cigarette, which was a great trouble at that time.

48th question by same. Who is the Mr. Gibbs referred to by you just now?

Answer. Mr. Gibbs is the man who was employed to run the Bonsack machine. He was sent there to take charge of the machine as soon as he learnt to run it, as my service was required at Lynchburg at the "Lone Jack" factory.

49th question by same. Was Mr. Gibbs so engaged by the Bonsack Co. in September, 1883, when you went to Washington?

Answer. Yes, sir; he was employed, I think, about the first of August by the Co. My instructions were to turn the machine over to him as soon as I thought he could run it.

50th question by same. Where is Mr. Gibbs now engaged and by whom?

Answer. He is engaged by the Bonsack Machine Co. at Allen & Ginter's. All the machines at Allen & Ginter's are under his supervision.

51st question by same. What salary did Mr. Gibbs then get and what does he now get?

Exception—The foregoing question is excepted to by defendant company as irrelevant.

Answer. Mr. Gibbs got $50 or $60 a month at first, afterwards he got $75. A part of last year he got $100. He now works by the thousand and makes over $200 a month.

52nd question by same. Did you ever see Mr. Strouse and Mr. Krise in Richmond after Mr. Strouse left in June, 1883, before you applied for your patent in Washington, on the 13th of September, 1883, or rather before you went to Washington on the 5th of September, 1883, to make application for it?

Answer. No, sir; I don't remember seeing either of them here. Mr. Strouse was here on the day I went to Washington and left a letter at Allen & Ginter's for me. They were here on the 12th of September, but not before I went to Washington.

53rd question by same. Did you have any conversation with Mr. Strouse or Mr. Krise or any of the officers of the Bonsack Machine Co. as to your improved tube before you went to Washington on the 5th September, 1883?

Answer. No, sir; I never had any conversation with any of them in regard to tube.

54th question by same. Did you give them any description of your tube before that time?

Answer. No, sir. They knew that I had made a tube that would make round cigarettes from samples I sent P. A. Krise.

55th question by same. Please look at these papers dated, one, Salem, Va., 21st August, 1883, marked D. B. S. Exhibit No. 1, and, the other, Exhibit P. A. Krise No. 2, dated Lynchburg, Va., and say whether or not you were acquainted with the handwriting of D. B. Strouse, and say in whose handwriting those letters respectfully are, by whom written, and to whom addressed.

Answer. The Exhibit D. B. S. No. 1 is in the handwriting of Mr. Strouse, whose handwriting I know. Exhibit P. A. K. No. 2 is in Mr. Krise's handwriting. They are addressed to me, and I received them.

56th question by same. Who is the person alluded to by Mr. Strouse in said Exhibit D. B. S. No. 1, when he says, "James is trying to adapt his machine to round work"?

Answer. James referred to is James A. Bonsack, the inventor of the Bonsack machine.

57th question by same. Where was he at that time, in August, 1883?

Answer. He was in Paris, France. That was his address.

58th question by same. Did you send him any of your cigarettes?

Answer. No, sir. I never had any communication with him.

59th question by same. In Exhibit D. B. S. No. 1 Mr. Stouse quotes you as saying that you can't make over 75,000 cigarettes a day. Could you make that number before making your improved tube or not—I mean good cigarettes?

Answer. I could not. I don't know how many cigarettes that was made on the machine per day before I made my improved tube. I should say that about 20,000 or 30,000. Mr. Pope said they were of no use. I don't know whether they were packed or not. The cigarettes were in a triangular shape, and they would not fit the packages. Mr. Pope told me that he did not intend to pack them. At the time I reported 75,000 I got the report from the packers.

60th question by same. Where did you make your improved tube?

Answer. I worked on it at night at my room, but principally at Allen & Ginter's factory. I worked on it after stopping time at the factory.

61st question by same. What was the usual stopping time at the factory in July?

Answer. I don't remember exactly the stopping time. We stopped when the whistle blew. The girls all leave and go home. I had girls to feed for me.

62nd question by same. Where did you get the material out of which it was made?

Answer. I got them from Bellenot of 14th street, between Main and Cary.

63rd question by same. Whose tools did you use *and* making it?

—. Some of the tools belong to Allen and Ginter, and part of them I borrowed from the engineer.

64th question by same. Did you finish making it at Allen & Ginter's and at your own house?

21 Answer. Yes, sir; I used the tube on the machine all day and took it off at night to get defective parts right.

65th question by same. Is that tube now in existence now or not?

Answer. Yes, sir; that tube is in existence now, at least a part of it.

66th question by same. Please look at this "Exhibit Tube I" and say whether that is the tube you made.

Answer. This is part of the tube. The end of it, about four inches, is gone. The tongue had been put in by some one else; it has been repaired; the tongue has been replaced by a new one. The

throat or guide described in my patent as letter "A" in figure 3 is also gone.

67th question by same. When and where did you first speak to Mr. Strouse or Mr. Krise about the principles of your improved tube?

Answer. I spoke to them about it at Ford's hotel on the 12th of September, 1883, when they were here; not then until after I had refused to sign a contract. Mr. Strouse and Mr. Krise came to Allen & Ginter's factory on the morning of the 12th, about 8 or 9 o'clock, looking at the machine and cigarettes, and when they got ready to leave they asked me to come to Ford's hotel and take dinner with them, which I did. After dinner Mr. Strouse says to me that we had better have a contract, as there had never been any between us, and they wanted to give me more pay than I had been getting, as they had other work for me to do. I told them I had no objection to having a contract, and Mr. Strouse pulled a contract out his pocket and said he had one ready prepared and would read it to me, as his writing was hard to read. I told him that I preferred reading it myself, and he handed it to me to read. I read it and told him I could not sign it. He asked me why; I told him because it deprived me of making any improvements, and, besides, it dated back to the 25th day of June, 1883. Then I told him there was no use to fool about it; that he wanted to stop the patent I had applied for; that I knew what they had come to Richmond for, and that I would not sign anything that interfered with my application in any way. Then they both said that was what they came to Richmond for and I would have to sign the contract or quit the company, and I told them I would quit, and left the hotel and went to my boarding-house.

68th question by same. Look at this paper, marked Exhibit D. B. S. No. 2, and state in whose handwriting it is.

Answer. It is in Mr. D. B. Strouse' handwriting. That is the contract he gave me to sign in September, 1883.

69th question by same. Was that the first time you had seen that contract?

Answer. Yes, sir; Mr. Strouse told me that he had just written it. It was the first time they had asked me to sign a contract.

70th question by same. Did they say to you that they had heard of your application for patent or not?

Answer. Yes, sir; they said they had seen a piece in the Lynchburg Advance saying that I had made an improvement on their machine and that I was in Washington to apply for a patent for it.

71st question by same. Did they offer to pay you anything for your improvement?

Answer. Mr. Krise offered to pay me $25 for my work on the tube, as I had done the work after working hours at the factory. Mr. Strouse asked me after Krise had left if $500 would be an inducement to me to sign that contract. Then he asked me if $1,000 would be an inducement. This was at the depot as Mr. Strouse was fixing to leave. I told him that it would not and there was no use of offering me any such amount, that I would not think of taking it. Then he said that was all that he could do; he would go to

Lynchburg and call a meeting of the board of directors and see if there couldn't be an agreement, and that I should stay here and go on with the changes that I had commenced in the feed of the
22 machine, as it would be a big loss to the company if it was not finished by me, and he thought it my duty to stay and complete the changes that I had commenced in the feed. The machine was turned over to Mr. Gibbs, and when I finished those changes I left here and went to Lynchburg.

72d question by same. Did you see Mr. Strouse or Mr. Krise after you left them at Ford's hotel again before you met Mr. Strouse at the depot as he was leaving?

Answer. Yes, sir; I met Mr. Strouse at the factory next morning; Allen & Ginter's.

73rd question by same. State what took place at the factory between you then.

Answer. I went to the factory to take the tube off the machine, and Mr. Gibbs told me that Mr. Strouse had told him not to let you touch the machine; that I was not in their employment, and that I had nothing to do with the tube or anything else belonging to the machine. Then I told him all right; I would wait until Mr. Strouse came down, which he said would be a few minutes. When Mr. Strouse came in I said to him, "Now, I will take my tube off the machine." He told me to stop; that I had no right to take it off; that my patent had not been issued, and he didn't — it ever would be. I then told him I didn't know whether I had a right to take it off or not; that the tube belonged to me. I had made it after working hours and bought the materials it was made of. I left it on the machine, as I did not know whether I had the right to take it off or not. Then Mr. Strouse asked me to stay and complete the changes I had commenced in the feeding of the machine, which I agreed to do, as he said he thought it was my duty. I never had charge of the machine again after it was turned over to Gibbs.

74th question by same. Is this tube filed in this cause as "Exhibit Tube" the tube then attached to that machine which you tried to take off and Mr. Strouse would not allow you?

Answer. Yes, sir; that is the one. I got it at Allen & Ginter's after my return from Europe—after I received my patent papers. I did not know they had been issued until I came back.

75th question. Is that the tube from which the drawings in your letters patent were taken?

Answer. Yes, sir. I made a sketch from this and then got up the specifications, which specifications and sketch I gave to Nottingham, my attorney in Washington.

76th question by same. Look at this paper, dated Salem, Va., 15th September, 1883, and say whose handwriting it is (paper filed, Exhibit D. B. S. No. 3) and to whom it is addressed and by whom it is signed.

Answer. It is in Mr. Strouse's handwriting, the president of the Bonsack Machine Co. It is addressed to me and signed D. B. Strouse. I received it by mail.

77th question by same. How long after your parting with Mr. Strouse at the depot was it before you received it?

Answer. I think about three days.

78th question by same. Were any members of the Bonsack Co. interested in the Lone Jack Co., mentioned by you above?

Answer. Yes, sir; they were. Mr. P. A. Krise was president. I think there were others, but I can't — positively.

79th question by same. How long after your interview with Mr. Strouse at Richmond in September, 1883, did you remain in the employment or pay of the Bonsack Machine Co.?

Answer. I suppose I remained in their pay and employment until after I got back from Europe, November 20th, 1884. I did some work at Lone Jack factory, but I do not know whether it was for the Lone Jack Co. or Bonsack Co. Mr. Krise paid me for one company or the other. He was president of one and secretary of the other.

80th question by same. Had you any engagement or contract with the Lone Jack Co.?

Answer. No, sir. The understanding was when I left here
23 that I was to go to the Lone Jack factory and stay there.

81st question by same. Who told you to go there?

Answer. Mr. Krise.

82nd question by same. What had you to do there?

Answer. I commenced putting up the machinery or having it put up—the engine, boiler, and shafting. I was asked by the board of directors of the Bonsack Machine Co. to assist Jim Bonsack in getting up a printing machine. I had gotten up a printer here in Richmond. Mr. Krise sent me the money. I don't know whether the company had anything to do with it or not. The printer that I got up in Richmond didn't use ink on it, because Allen & Ginter wouldn't have ink on the cigarettes. James Bonsack and myself were to put the inking attachment to it. I left and went to Europe before it was completed.

83rd question by same. Were you ever discharged by the Bonsack Machine Co. before you went to Europe?

Answer. No, sir; I was never discharged. They told me in September that I would have to quit if I did not sign that contract. I told them I would quit. I have already stated why I did not quit. I had packed up all my things to leave on next train for Lynchburg when Mr. Strouse came down to the factory next morning after conversation at Ford's hotel.

84th question by same. When did you go to Lynchburg to put machinery at Lone Jack factory?

Answer. About the time of Lynchburg fair. Mr. Krise told me that he wasn't ready for me to go to work and had nothing for me to do, so I went to fair every day. I think I was back in Richmond twice after I went there. They had some trouble with the machine and I came back to see about it. Mr. Pope telegraphed for me, I think.

85th question by same. What pay did you get from September, 1883, until you went to Europe?

Answer. $75 a month.

86th question by same. Was there any new agreement entered -to between you and Mr. Krise or Mr. Strouse or any one else as to said payment of $75 a month after the interview between you and those gentlemen at Ford's hotel in September, 1993, up to time of your going to Europe?

Answer. Yes, sir; there was an agreement. The agreement was made about the 28th—27th or 28th December, 1883. The agreement was that I was to have $75 a month and all my expenses, traveling and hotel bills paid and $50 extra while out of the United States. I have a copy of that agreement at home, which I will bring and file. I think my answer is not absolutely correct. The travelling and hotel bills were to be paid while I was out of the United States.

NOTE.—Answer *accepted* to because it attempts to detail a written engagement and is not responsive to question.

87th question by same. Was the agreement just mentioned by you the one entered into between you and the Bonsack Co. just prior to your going to Europe for them or not?

Answer. Yes, sir; I left for Europe January 1st, 1884.

88th question by same. Was there any other agreement entered into between you and the Bonsack Machine Co. between said interview at Ford's hotel and that agreement about the 28th—27th or 28th of December, 1883?

Answer. No, sir; we had no other agreement.

89th question by same. For whom did you work with Mr. J. A. Bonsack in making the printing machine mentioned above?

Answer. The Bonsack Machine Co.

90th question by same. Did they ever dock your salary of $75 a month on account of your absence from work?

Answer. No, sir; my salary never was docked. That was my understanding when I went with company—that my salary was never to be docked.

91st question by same. When did you first see Mr. James
24 A. Bonsack before you went to Paris January 1st, 1884, after the 25th day of June, 1883?

Answer. I don't remember the date. It was some time in October. When he came from Europe he came by Richmond. I am not certain it was in October He came to the factory of Allen & Ginter, looking at -he machine, the tube, and I put the printer on and worked it for him to see. We didn't use the printer because Allen & Ginter didn't have their work stamped.

92nd question by same. Did you explain to him your tube?

Answer. Yes, sir. I staid there three or four hours looking at it. He showed me part of a chain that he had been making to make round cigarettes. It was to work in place of the presser wheel in connection with some gro-ve to pulleys. He said they wouldn't have square cigarettes in Europe where he had been exhibiting his machines.

93rd question by same. Did he say anything about your tube

being similar to one he had before made or one that had been used by the Bonsack Machine Co.?

Answer. No, sir; he did not. He told me that he had gotten a letter from Mr. Strouse saying that I would send him a tube to make round cigarettes and a sample of the cigarettes. He said that he had not received the tube nor the cigarettes and that he had left Europe and come to America against the company's order to see this tube, as he couldn't do anything there.

94th question by same. Can you say when Mr. James A. Bonsack was sent to Europe by the company or not?

Answer. No, sir; I cannot. I think that was his second trip there.

95th question by same. Do you know whether Mr. James A. Bonsack returned to Europe or not after that interview with you?

Answer. No, sir; he did not return. I was sent to finish the work he had left unfinished.

96th question by same. You have before mentioned the trough "A," the sides and bottom marked *aa'a*, of figure 3 of your patent. Please state what is the use of that trough "A" and if the Bonsack and Hook patents had it.

Answer. That trough was to support and guide the tobacco and keep the steel belts clear. It was to guide the tobacco from the steel belts to the throat of tube. The Bonsack patent 245,795, in figure 1, is shown at point X^3. There is no support or guide for the tobacco; consequently it would break and fall on the floor and often be carried around by the side belts. There were no supports in Hook or Bonsack's patent. It was not required in Bonsack's first patent where his compressing tube was used, but it was very necessary in his last patent, as there were no supports from the compression trough to his tube.

97th question by same. You have said that you started for Europe 1st January, 1884, and remained there until November, 1884, and that the Bonsack Co. was to pay your traveling expenses. Did they ever pay them?

Answer. They paid part of my traveling expenses, but they never paid me for my salary or expenses since I got back. When I left Paris Mr. Strouse signed my account for salary and expenses. My expenses back and my salary up to the time I arrived here has never been paid, nor for the time Mr. Strouse signed them, for I have the accounts signed by him. He told me Mr. Krise would pay that account and my other expenses when I got here. Mr. Strouse told me that he did not have the money to pay me in Paris. After I left Paris Mr. Strouse cabled Mr. Krise not to pay me. Mr. Kise offered to pay the account if I would sign an agreement for six months longer with the Co. I told him that I was ready to go anywhere that he wanted to send me, but that I would not sign another contract for six months to get what money was due me, and that I wouldn't work any longer unless my account was paid up. That he refused to do and the account is unpaid yet.

NOTE.—The foregoing question and answer 97th is accepted
25 as wholly irrelavent by counsel for defendant Co.

98th question by same. Who told you that Mr. Strouse had cabled Mr. Krise?

Answer. Mr. Krise told me and showed me the cablegram.

99th question by same. Is the Mr. Strouse so often named by you the gentleman now present attending the taking of these depositions as counsel for the Bonsack Machine Co.?

Answer. Yes, sir.

100*th* question by same. When you went to Europe in January, 1884, how long did you expect to be there in the employment of the Bonsack Machine Co.?

Answer. Mr. Strouse told me that he would be there in April and would relieve me, and I could come back home; that as soon as he got back from Cuba he would come to France and I could come back home.

101*th* question by same. Did Mr. Strouse go to Paris; and, if so, when?

Answer. Yes, sir; Mr. Strouse came to Paris some time in May, 1884.

102*th* question by same. When did you first hear that letters patent had been issued to you?

Answer. I think about December the first, 1884—after I left Lynchburg and came to Richmond.

103*th* question by same. Did Mr. Strouse speak to you about your letters patent when he saw you in Europe or at any time during your stay there?

Answer. Yes, sir. I met with Mr. Strouse at the American reading-room in Paris, and I told Mr. Strouse that I had heard by letters that he was trying to stop my patent from being issued, and wanted to know whether it was so or not. He said that he hadn't interfered with my patent, but that he had made application for an open-gro-ve tube, for -hich he expected the patents had been issued. He asked me if I had gotten my patent papers, or whether they had been issued or not. I told him that I didn't know whether they had been issued or not; that I had no notice that they had been issued. He said that he didn't think they ever would be issued. I then said that I couldn't see how he could get a patent on an open-gro-ve tube exactly like the description of mine, but that I didn't remember the wording of my specification, but that I didn't think I stated whether my tube would have open gro-ves or not; that I thought they stated there would be paper guides to protect the paper from the tobacco while being pressed into a cigarette filler.

104th question by same. Did you speak to Mr. Strouse at that time about your return to America?

Answer. Yes, sir. He told me that I could come to America if I could make a tube and go to Rome and start a machine; that he would take a man with him to learn to run the machine, and that I could come straight to America; that we would only be in Rome a short time.

NOTE.—The above question and answer are excepted to because of irrelavancy.

105th question by same. Why, then, did you not return to America instead of going to Rome?

Answer. In the first place, I didn't have the money. Mr. Strouse would not pay my account, and said that he didn't have any money belonging to the Bonsack Machine Co., and if I left I would get nothing for my time, nor they would not pay my expenses back, and that I would have to get what they were owing me the best way I could; that he would not sign my account. They were owing me at that time some five or six hundred dollars; said that if I would make a tube and go to Rome he would get the money in that time and settle with me and give me a ticket back to America.

NOTE.—The question and answer are excepted to for irrelavancy.

106th question by same. Did you go to Rome?

Answer. Yes, sir; I made a tube and went to Rome. I
26 showed the machine in Rome to the Italian government.

107th question by same. When did you see Mr. Strouse next in Europe?

Answer. He went with me to Rome. I left him in Rome when I came back to Paris, in July, 1884.

108th question by same. When did you see him next after your return to Paris in July, 1884?

Answer. I don't remember the date, but it was a short time before I left Paris to come to America. Mr. Strouse settled up my account when he came back and paid my account that I had sent him to date of the account.

109th question by same. Did he pay you all that was due you up to date of payment?

Answer. I think he did. I had to quit work before he would pay my account. I quit work because he would — pay my account. He paid my account and I went back to work again until I had finished what work I had to do there. Then I left and came to America.

110 question by same. Did he give you the money to pay your traveling expenses back, either then or at any other time?

Answer. No, sir; he did not. They were never paid.

NOTE.—All questions and answers from question 105 are excepted to as irrelavent.

111th question by same. What did you do with the tube you made for the machine in Rome?

Answer. I don't remember. I think the tube was broken.

112th question by same. Had you made or superintended the making of any tubes for the Bonsack Co. in Europe prior to the conversation just above mentioned between you and Mr. Strouse in the summer of 1884 about the machine in Rome?

Answer. No, sir; I had not.

113th question by same. Did you make or superintend the making of any other tubes for the company?

Answer. No, sir.

114th question by same. Did you know of any tubes being made

in Europe like yours by the Bonsack Co. in order to be shipped to and used in the United States?

Answer. I knew that the tubes were being made by Gottendorf, in Paris, but I understood they were for Europe. I spoke to Gottendorf about making them. I told him that I didn't think he had the right to make them, as it was my patent. He said any one had the right to make them in France; that patent of the United States had nothing to do with France. He wanted me to receive those tubes the day I left Paris. I told him that I would not have anything to do with them; that Mr. Strouse had ordered them, and that he might receive them.

115th question by same. Do you know Mr. Peters, of the firm of Peters & Flood, of Lynchburg, well?

Answer. Yes, sir; I have known Mr. Peters six or seven years before he came to Lynchburg.

116th question by same. What is — business of Peters & Flood?

Answer. They were engaged in the manufactury of plug tobacco.

117th question by same. Did you ever ask Mr. Peters to get you employment with Bonsack and Co. or not?

Answer. No, sir; I never asked any one to get me employment there. Bob Thurman asked me if I could accept a situation with the company.

118th question by same. When you came to Richmond, in June, 1883, did you meet Mr. Strouse at Ford's hotel in Richmond?

Answer. I met Mr. Strouse at factory of Allen & Ginter. We went from there to Ford's hotel together. We occupied the same room while there.

119th question by same. Did Mr. Strouse then show you the Bonsack patent and drawings, as alleged in defendant's answer?

Answer. No, sir; I never saw drawings of the Bonsack machine until I went to Washington. Then Nottingham and myself examined them.

27 120th question by same. By whom was the tube used in the Bonsack machine when you first saw it in Aller & Ginter's, in June, 1883, made?

Answer. Made by Thurman, I think. He was employed to make all their tubes. I was directed to order tubes from him if I wanted any.

121st question by same. Did you ever have any discussion with Mr. Strouse between June, 1883, and your meeting at Ford's in September, 1883, as to the construction of a paper die or tube to the Bonsack cigarette machine?

Answer. No, sir; I never had any.

122nd question by same. Did the Bonsack Co. pay you for the tools, mandrels, and materials used by you in making your tube?

Answer. No, sir; they never did.

123rd question by same. For what tools, mandrills, and materials, if any, did the Bonsack Co. pay for here in Richmond while you were here that you know of?

Answer. I bought such things as were required to repair the ma-

chine if any part of it broke. I charged such things on my account. I don't remember what they were.

124th question by same. Was the tube or die which you made in Paris to use in Rome exactly similar to that patented by you in your patent exhibit here?

Answer. Yes, sir; it was the same tube made on the same principles.

125th question by same. Did you put any such tube on any other machine of the Bonsack Co. in Europe?

Answer. I used the tube on machine in the French factory like my patent.

126th question by same. What became of that tube?

Answer. I left it on the machine in the French government factory.

127th question by same. When did you make that?

Answer. That was made by Gotendorf & Co., and not by me.

128th question by same. Did you direct Gotendorf & Co. or any one else to make tubes like yours?

Answer. No, sir.

129th question by same. What difference in the tongue of tube used in the Bonsack machine now at Allen & Ginter's and tongue of your tube?

Answer. There is no difference in them, except that they have substituted a steel tongue for a brass tongue.

130th question by same. Which is the more flexible or elastic?

Answer. Neither of them are flexible or elastic. The shape of the tongue prevents its from being elastic, as it is a half round and can't be sprung in any way.

131st question by same. Is either of them adjustible; and, if so, which is more so?

Answer. They are neither of them adjustible. They are set in place and fastened firm.

And further this deponent saith not.

E. T. POLLARD.

JOHN POPE, a witness of lawful age, after being duly sworn, deposes as follows:

1st question by JOHN DUNLOP, counsel for plaintiff. What is your name, age, residence, and occupation?

Answer. John Pope; 31; Richmond, Va.; tobacco and cigarette manufacturer.

2nd question by same. Are you doing business alone or with any one else; and if with some — else, under what name?

Answer. I am the junior member of the firm of Aller & Ginter. Lewis Ginter is my sole partner.

3rd question by same. Do the firm of Allen & Ginter use
28 the Bonsack cigarette machine?

Answer. Yes; since 1882, I think.

4th question by same. Do you know Edward T. Pollard, the plaintiff in this cause?

Answer. Yes.

5th question by same. Is he employed in the factory of Allen & Ginter, and how long has he been in that factory?

Answer. He has been employed there about two years.

6th question by same. Has he been employed all that time by Allen & Ginter?

Answer. Yes.

7th question by same. Was he in your factory before he was employed by Allen & Ginter in the employ of the Bonsack Machine Co. or not?

Answer. He was there in the employ of Bonsack Machine Co. I don't remember how long.

8th question by same. State as fully as you can the working of the Bonsack machine in the factory of Allen & Ginter as to quantity and quality of cigarettes before and after E. T. Pollard came there.

Answer. When we first got the machine we experimented with it, with Mr. James A. Bonsack in charge. The machine made more or less cigarette-, but not satisfactory. They were square or flat cigarettes. For a year we experimented, and the products was either distroyed, but some portion—probably one-third—sold. That went on for a year and a half. When we got the iron machine—the first was a model—we further experimented, but with little success at first; in fact, so much so that we would have abandoned the machine, and so informed the Bonsack Co., because the work was so unsatisfactory that we would not risk our reputation as manufacturers in disposing of the product. After Mr. Bonsack left Mr. Foutz had charge of it. He was succeeded by Mr. Pollard. After he, Pollard, came there there was some alterations made in the working parts of the machine, which did a fair amount of work, but still unsatisfactory. I complained to Pollard of the work a great deal, which upset him very much, and I believe he felt like quitting.

9th question by same. Did Pollard say anything to you about the tube then in use, or any alterations as to it?

Answer. He came to me one day and said, I beleive I can make you round cigarettes now. That was the great dispute at the time—about making them flat or round.

10th question by same. Did he make them round?

Answer. He made them round after some experimenting.

11th question by same. What is the difference in marketable value of square and round cigarettes and the advantage of one over the other?

Answer. The advantage was that you could sell cigarette- that was made round like hand-made cigarette-, whilst you could not dispose of the others.

12th question by same. Was the tobacco held better in the round cigarette than in the square?

Answer. Yes; it always does.

13th question by same. Did Pollard entirely charge the tube in that cigarette machine?

Answer. From what he explained to me and from what I saw in

the turning out of the work I certainly did think there was a change in making marketable cigarettes.

14th question by same. You have said only about one-third of the goods made by that machine before Pollard's alteration of the tube was marketable. What proportion is now marketable since he made that change in tube?

Answer. I suppose within five per cent; ninety-five per cent, say. Even more than that is now marketable.

15th question by same. Did you ever examine the tube that Pollard made and the tube now used in the Bonsack machines? And, if so, state how they differ, if at all.

29 NOTE.—Question objected to for the reason that it is based upon the presumption that the tubes first made by Pollard are the same as those now in use on the Bonsack machine, which is not the case.

Answer. Yes; I examined so far as I know about machinery; I am not an expert at it; they are essentially the same so far as I can see.

16th question by same. Did you ever express to the Bonsack Co. your dissatisfaction with their machines up to the time Pollard made the change in the tube?

Answer. Yes; very decidedly; we said that we did not care about having the machines any longer.

17th question by same. How many machines have you now of Bonsack Co.?

Answer. Five, and they are giving satisfaction.

Cross-examination:

1st X question. Was not the chief trouble with the machine the tube, and did you not insist from time to time that the company must provide better tubes for the machine and such as would make round cigarettes?

Answer. Yes; the last twelve months particularly so.

2 X question. Did you not do so more especially before Mr. Pollard was employed and when the machine was making square or imperfect cigarettes?

Answer. I don't know whether it was the fault of the tube or machine part, but it was explained to me that it was the fault of the tube.

3rd X question. You say in an answer above in substance that before Pollard came to the factory you were disposed to send the machine away. Did not D. B. Strouse bring E. T. Pollard to your factory and insist that he then had a man who could and would make proper tubes to the machines, and did you not at the request of the said Strouse tell him to go on and try, or words to that effect?

Answer. I don't remember anything about the tubes then; that was before I knew about the tubes. I believe he did say that he had a man who would do proper work. The machines remained by consent of firm, pending the new efforts.

And further deponent saith not.

JOHN POPE.

DAVID WILDON HUHGES, Jr., another witness, after being sworn, deposes as follows:

1st question by JOHN DUNLOP, counsel for plaintiff. What is your name, age, residence, and occupation?

Answer. David Wildon Hughes, Jr.; 42 years; Richmond, Va.; machinist and engineer.

2nd question by same. Where are you engaged as machinest and engineer?

Answer. Allen & Ginter's; I have been there about fifteen years.

3rd question by same. Do you know the Bonsack cigarette machines used in the factory of Allen & Ginter?

Answer. Yes, sir; I do.

4th question by same. Look at Exhibits "Tube" and say if you have ever seen it before; and, if so, where did you first see it?

Answer. Yes, sir; I saw Mr. Pollard making this tube shortly after he came to Allen & Ginter's, when the iron machine came from Bonsack Machine Co.

5th question by same. What time in the day or night did you see Mr. Pollard making that tube?

Answer. I don't know that I ever seen him working on it in the day, but I have seen him at night after we quit, working on it.

30 6th question by same. Whose tools did he use in making it?

Answer. The tools he borrowed from me, but they belong to Allen & Ginter.

7th question by same. Was the tube on the Bonsack machine before Pollard went there or at time when he arrived there similar in construction to exhibit now before you?

Answer. No, sir.

8th question by same. What Pollard do you mean?

Answer. The one who is with Allen & Ginter now—Edward T. Pollard.

9th question by same. Did the Bonsack machine at Allen & Ginter's do effective or good work before Pollard came there and made his change in the construction of the tube?

Answer. No, sir; it did not.

10th question by same. Do you know what was done with the cigarettes made by that machine before Pollard came there?

Answer. A good deal of them was torn up and tobacco taken out of them and a good deal burnt up.

11th question by same. Are the tubes now used on the Bonsack machine different or not in construction from the tube exhibit now before you?

Answer. Not in construction, but it is in length. This looks like piece was broken off.

12th question by same. Are the tubes now used on five Bonsack machines at Allen & Ginter's exactly similar in construction to the tube now before you, with the simple difference that they are longer that it on account of a piece of it being broke off it or not?

Answer. Yes, sir.

15th question by same. Have the tubes now on the Bonsack machines an elastic or adjustible tongue or not?

Answer. No, sir.

Cross-examination:

1 X question by defendant's counsel. In what particular work were you engaged at Allen & Ginter's in the months of June, July, August, and September, 1883?

Answer. Engineer.

2nd X question. Describe the situation of the engine you were running in Allen & Ginter's factory at that time, and also situation of Bonsack machines as to each other.

Answer. The engine sets parallel with the new addition put on there, and Bonsack machine was setting in same building on second floor, driven from counter-shaft above, getting its power from main shaft below.

3rd X question. Was the Bonsack machine in the new addition?

Answer. Yes, sir.

4th X question. Was not the Bonsack machine on same floor where many girls were at work sorting and packing cigarettes and where cigarettes were boxed?

Answer. Yes, sir; but in a room closed up by itself and secluded from any one unless doors were open.

5th X question. Could not Mr. Pollard have worked on tubes and on the machine without your knowledge?

Answer. Yes, sir; he could; but, according to the working of machine, I don't think he had much time to work on tube.

6th X question. Did he not have a set of tools in the room with the machine?

Answer. Not that I know of, except a few wrenches that come with the Bonsack machine; none that I seen.

7th X question. In making tubes was it not necessary for him to have a suitable mandrill or mandrills over which to shape that tube?

Answer. Yes, sir.

8th X question. Did you furnish him such a mandrill?

31 Answer. I lent him a piece of round steel between three and four feet long.

9th X question. What was the diameter and shape of that piece of steel?

Answer. The steel was perfectly round; I don't know the exact diameter. He said he wanted a piece about the size of a cigarette, and looked over a lot I had and said he thought this would do.

10th X question. Were there not days soon after Mr. Pollard came to Allen & Ginter's on which he did not run his machine at all?

Answer. Yes, sir; but those days he was working on the machine.

11th X question. At what time in the evening was the factory at Allen & Ginter's closed?

Answer. Six o'clock; engine shuts down at six.

12th X question. Were not all the employees of the factory then required to leave the building?

Answer. No, sir; they were not required to leave, but, like any one else, were anxious to leave.

13th X question. How long could they remain after closing hours?

Answer. It depended on how much work the book-keepers had to do in the office.

14 X question. Did not book-keepers, as a rule, leave at six?

Answer. No, sir.

15th X question. Were the other employees of Allen & Ginter permitted to remain in the factory until the book-keepers left?

Answer. With some exceptions, if they had any work to do. I myself have worked until eleven or twelve o'clock at night.

And further this deponent saith not.

D. W. HUGHES, JR.

Mr. E. T. POLLARD was re-called and cross-examined by D. B. STROUSE, attorney for defendant company:

1st X question. You said that you worked on your tube after factory hours. Did you inform the Bonsack Machine Co. of that fact or at all that you were making tubes?

Answer. I informed them of that fact—that I had made the tube after quitting time at the factory—at Ford's hotel the time we were there, September 12th, 1883, but not before that time. I think that I wrote to Mr. Krise that I had made a tube that made that round work, *if* sample of which I sent him—cigarette I mean. At the time I told him about it Mr. Krise offered to pay me twenty-five dollars, as it was made out of time, as I before stated.

2nd X question. Did you write the letter referred to to Mr. Krise before or after the interview referred to by you at Ford's hotel; or, if you remember, when did you write it, if at all?

Answer. If I wrote it it was before. I am not certain that I wrote it. I am not certain that I told him how the round work was done. I wrote him at the end of every day — account of work done, unless something happened to prevent it.

And further this deponent saith not.

E. T. POLLARD.

EASTERN DISTRICT OF VIRGINIA, *City of Richmond,* } *To wit:*

I, B. Rand. Wellford, a notary public for the city of Richmond, in State of Virginia, do hereby certify that I was attended at the time and place mentioned in the foregoing depositions by John Dunlop, solicitor for E. T. Pollard, the complainant, and D. B. Strouse, solicitor for the Bonsack Machine Company, re-
32 spondent in the said cause, and Edard T. Pollard, John Pope, David Wildon Hughes, Jr., witnesses, who are of sound mind and lawful age and who were duly cautioned and sworn by me

and examined, and their depositions having been reduced to writing by me, were signed by said witnesses in my presence; and I further certify that I am not of counsel or in any way interested in the event of said cause.

I herewith — commission appointing me special examiner to take testimony of E. T. Pollard *vs.* The Bonsack Machine Co., in behalf of E. T. Pollard, complainant, although *although* it was agreed between the aforesaid John Dunlop and D. B. Strouse that the said depositions should be read as evidence without any commission being required.

Witness my hand and seal, at the city of Richmond, in said district, this the 21st day of May, 1887.

[Seal B. Randolph Wellford, Notary Public, Richmond, Va.]

B. RAND. WELLFORD,
Notary Public.

33 EXHIBIT "P. A. K. No. 1." Filed with E. T. Pollard's Deposition.

BONSACK MACHINE CO.,
OFFICE OF SECRETARY AND TREASURER,
LYNCHBURG, VA., *July* 21*st*, 1883.

E. T. Pollard:

Yours of the 20th to hand. Mr. Seagal, a cigarette maker from Durham, N. C., was here to-day. I showed him your work that you brought up Monday. He noticed immediately that some were too tight; some too tight at end and some in centre of cigarette. He said he would not pack such. I fear that Mr. Pope has put up cigarettes that will be complained of and will blame us. Do try to do the necessary work on machine so it will make a uniform and perfect cigarette.

Yours, K.

EXHIBIT "P. A. K. No. 2." Filed with E. T. Pollard's Deposition.

BONSACK MACHINE CO.,
OFFICE OF SECRETARY AND TREASURER,
LYNCHBURG, VA., *Aug.* 22, 1883.

E. T. Pollard, Rich'd:

Yours of yesterday and to-day rec'd. I received the package of cigarettes. I think they are the best you have made. I like them much better because they are round. I sent to Philadelphia and got the steel belts that belong to us; they are now in my office. If you need any you can write me, or telegraph for them. I intended to come down this week, but it is so hot will not come.

Y'd, P. A. KRISE.

EXHIBIT "D. B. S. No. 1." Filed with E. T. Pollard's Deposition.

BONSACK MACHINE CO.,
SALEM, VA., 21*st Aug.*, 1883.

Mr. Pollard.

DEAR SIR: Mr. Krise sent me some of the samples you sent him. They are as good cigarettes as I have ever seen, and much rounder than I ever saw made on the machine.

James is trying to adapt his machine to round work. I want you to send him at once, in a good box tied so that it can be opened, say seven cigarettes—they will not reach him if you send more—fair samples, or hardly as good as the average work. Now, don't mislead him by sending more than average samples. Write him at once and fully as to how you have gotten the machine to do this work. Be so explicit in your letter that he can at once try his machine in the same way.

You say you can't make over 75,000 cigarettes a day. You are running the machine (I think too fast) at a rate of 11,000 per hour, and at that rate 7 hours would make 77,000. If the machine works as it ought I know it should run more than 7 hours.

I am, however, not complaining; I just want you to do the very best you can.

Yours truly, D. B. STROUSE.

34 EXHIBIT "D. B. S. No. 2." Filed with E. T. Pollard's Deposition.

Ford's hotel, opposite Capital park.

RICHMOND, VA., 188–.

Whereas the Bonsack Machine Company has employed me as a mechinist for the said company to set up and run the Bonsack cigarette machines and adapt them so far as I can to the most perfect work, which said services are to continue so long as mutually agreeable, and for which I am to receive a monthly salary, to be fixed from time to time at what my services, all things included, may be reasonably worth, said salary to be fixed and agreed upon at all times in advance, I do hereby agree to and with said Bonsack Machine Co. that I will do all that I can to promote their interests, and that all changes, alterations, and improvements which I shall at any time be able to make on the said machine shall be for the exclusive use and benefit of the Bonsack Machine Company.

25th June, 1883.

EXHIBIT "D. B. S. No. 3." Filed with E. T. Pollard's Deposition.

D. B. Strouse, attorney-at-law.

SALEM, VA., 15*th Sept.*, 1883.

Mr. Pollard.

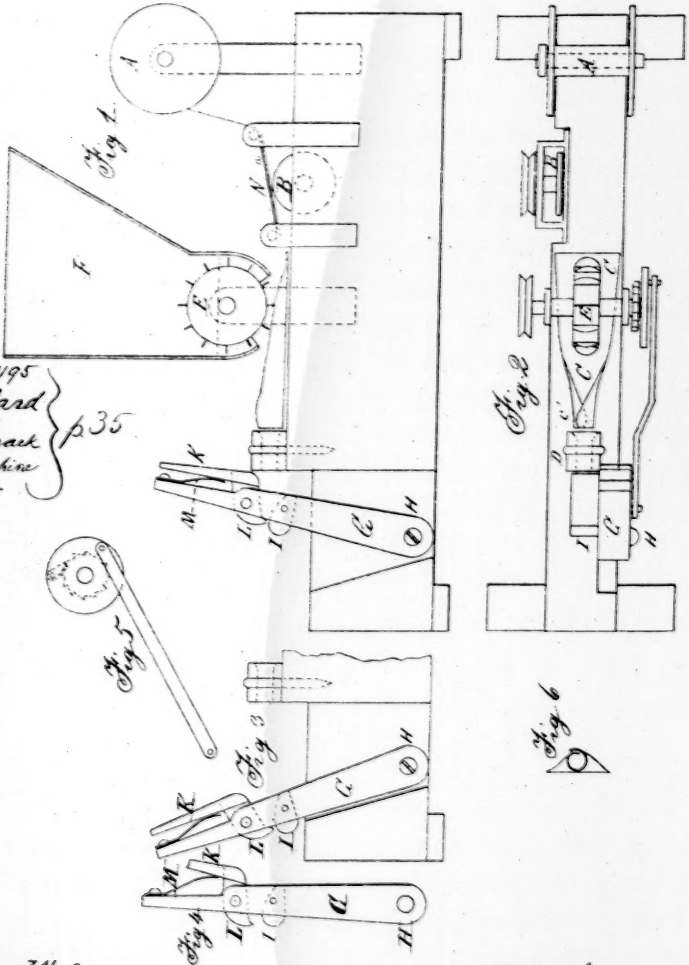
DEAR SIR: We had no meeting of the board yesterday. I hope

A. H. HOOK.

CIGARETTE MACHINE.

35

No. 184,207. Patented Nov. 7, 1876.



No. 1195 Pollard vs Bonsack Machine Co } p. 35

Witnesses.

William A. Kerr

John M. Keating

Inventor

Albert H. Hook

matters can be satisfactorially arranged, as I am very anxious to so, as I want to retain you. Mr. Krise has no belting; have written Mr. Bonsack to send it to you if he has it, and if not to order it to you from Philada.

I hope the change in the gearing of the feed will do well. Send me the tube as soon as possible, as I want to send that and some other matters to Mr. Bonsack.

Yours truly, D. B. STROUSE.

36 UNITED STATES PATENT OFFICE.

ALBERT H. HOOK, of New York, N. Y., assignor to Thomas Jones and J. H. Darlington, of same place.

Improvement in Cigarette-Machines.

Specification forming part of Letters Patent No. 184,207, dated November 7, 1876; application filed April 3, 1876.

To all whom it may concern:

Be it known that I, Albert H. Hook, of the city, county, and State of New York, have invented an improved machine for making cigarette-cylinders, which invention is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

(Here follows diagram marked p. 35.)

Figure 1 is an elevation of the machine, partially shown in section. Fig. 2 is a plan view of the machine, the hopper F and the plate P being removed. Figs. 3 and 4 represent the drawing apparatus in positions different from that shown in Fig. 1. Fig. 5 is a front view of the device for propelling the tobacco-feed wheel. Fig. 6 is an end view of the front end of the trough C, where the paper strip is formed into a tube.

The object of the invention is to construct a machine which will make cigarette-cylinders by forming an endless ribbon, *a*, of paper into a tube by drawing it through a former and filling it with tobacco prior to closing the paper tube.

The construction of the machine is as follows: A ribbon of paper of the required width comes from a spool, A, passes over a gum-wheel, B, which puts a narrow streak of gum onto the lower side of the paper ribbon, parallel and very close to one edge thereof. Thence the paper passes into a trough, C, which, starting from a flat, gradually curves more and more upward, until it finally terminates at *c'* in a tube-former. Thus the paper, as it passes along this trough C, is gradually formed into a tube, but so that the gummed edge of the paper ribbon is turned up and lapped over by the opposite edge. Thence the so-formed paper tube passes into a hollow cylinder, D, and, passing through this cylinder, the two edges of the paper strips are caused to adhere together. Over the forming-trough C there is a bucket-wheel, E, which, by some mechanism, receives an inter-

mittent revolving motion. Its upper portion travels in a hopper, F, which contains granulated or otherwise prepared tobacco. The buckets will deliver the tobacco below upon the paper ribbon before the said ribbon is formed into a tube.

The mechanism to draw the tube or paper through the tube-forming apparatus, as shown in the drawings, consists of the following parts: a lever, G, vibrating on a fulcrum, H; a projection, I, fastened to the side of the lever G; a nipping-lever, K, jointed at L to the side of the lever G; and a spring, M, which serves to keep the lever K away from lever G.

To draw the paper tube by this device, the operator moves the lever G to the position as shown in Fig. 1, while the nipper is left open. Then he closes the nipping-lever, thereby clamping the cigarette cylinder or tube between the lower end of the nipping-lever and the upper surface of the projection I. Then he moves the lever G and its appendages forward to a position as shown in Fig. 3, thereby drawing out the length of a cigarette-cylinder.

By repeating this operation, an endless tube filled with tobacco can be drawn, which tube may be afterward cut up into cigarette-cylinders in the flattened places that have been in the nippers, either by hand or by an automatic cutting apparatus attached to the machine; or the drawing device may consist of a series of pairs of grooved rollers, to take hold of the cigarette-cylinder and pull it along continuously.

The device for feeding the tobacco down upon the paper ribbon may be varied according to the character of the tobacco of which the cigarette-cylinder is to be made.

To keep the paper ribbon in close contact with the periphery of the gum-wheel B, there is a stationary plate, N, between which and the gum-wheel the paper ribbon passes.

What I claim as my invention is—

1. The method herein described of forming cigarette-cylinders, consisting in drawing a ribbon through a tube-forming die, and simultaneously feeding the tobacco upon the ribbon, the same being previously gummed and finally pasted, as herein described.

36½ 2. The combination of spool A, gumming-wheel B, trough C, cylinder D, with a mechanism for charging with tobacco and drawing the ribbon *a* through the trough and cylinder, as set forth.

3. The combination of the hopper F, wheel E, trough C, cylinder D, and a mechanism for drawing the ribbon *a* through the trough and cylinder, as described.

4. The combination of the wheel E, trough and cylinder C and D, and the drawing mechanism, as herein described.

ALBERT H. HOOK.

Witnesses:

WILLIAM A. KERR.

JOHN M. D. KEATING.

(Model.) 5 Sheets—Sheet 5.

J. A. BONSACK.

Cigarette Machine.

No. 238,640. Patented March 8, 1881.

Fig. 14.

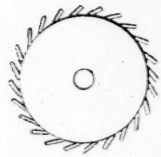


Fig. 16.



Fig. 17.

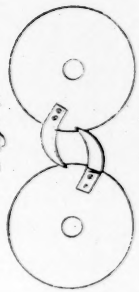
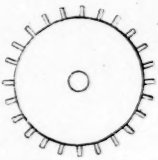


Fig. 13.



Fig. 15.



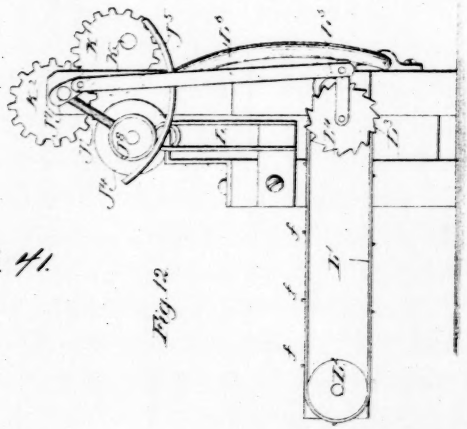


Fig. 12.

No. 1195
Pollard
v.
Bonsack
Machine
Company
p. 41.

WITNESSES:

John P. E. Brinkhurst

Edw. H. Byrn.

INVENTOR:

J. A. Bonsack

BY Munn & Co

ATTORNEYS.

(Model.)

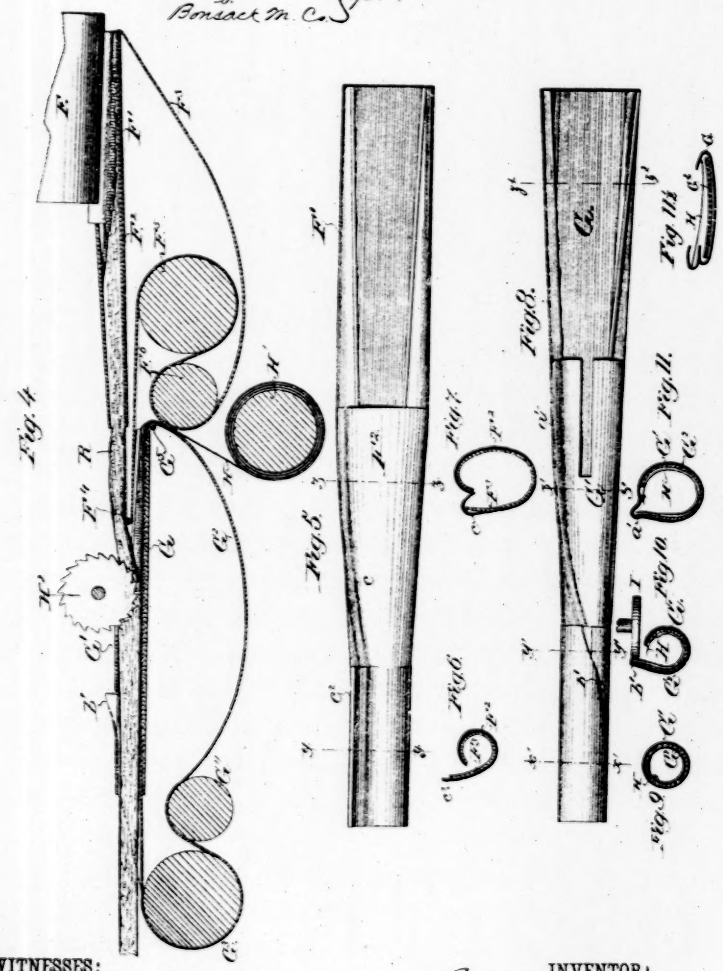
5 Sheets—Sheet 4.

J. A. BONSACK.

Cigarette Machine.

No. 238,640. Patented March 8, 1881.

No 1195
Pollard
vs.
Bonsack M. Co. } p. 40



WITNESSES:

John F. C. Freinkert

Edw. W. Byrn.

INVENTOR:

J. A. Bonsack

BY Munn & Co.

ATTORNEYS.

(Model.) 5 Sheets—Sheet 3.

J. A. BONSACK.

Cigarette Machine.

No. 238,640. Patented March 8, 1881.

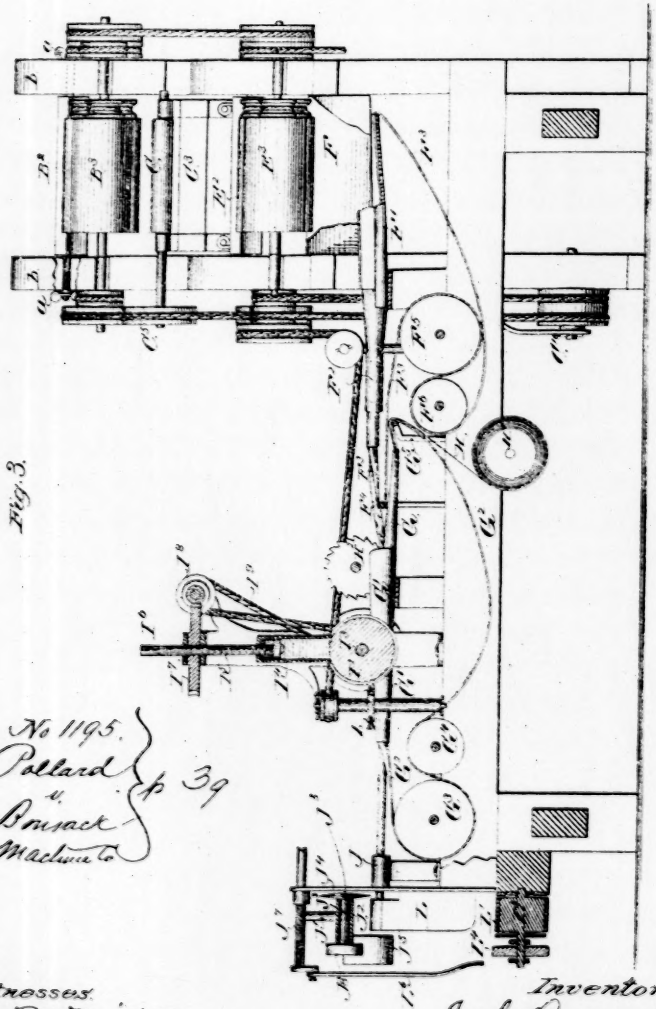


Fig. 3.

No 1195.
Pollard
v.
Bonsack
Machine Co.
p 39

Witnesses.
John F. C. Brinkley
Edw. M. Byrn

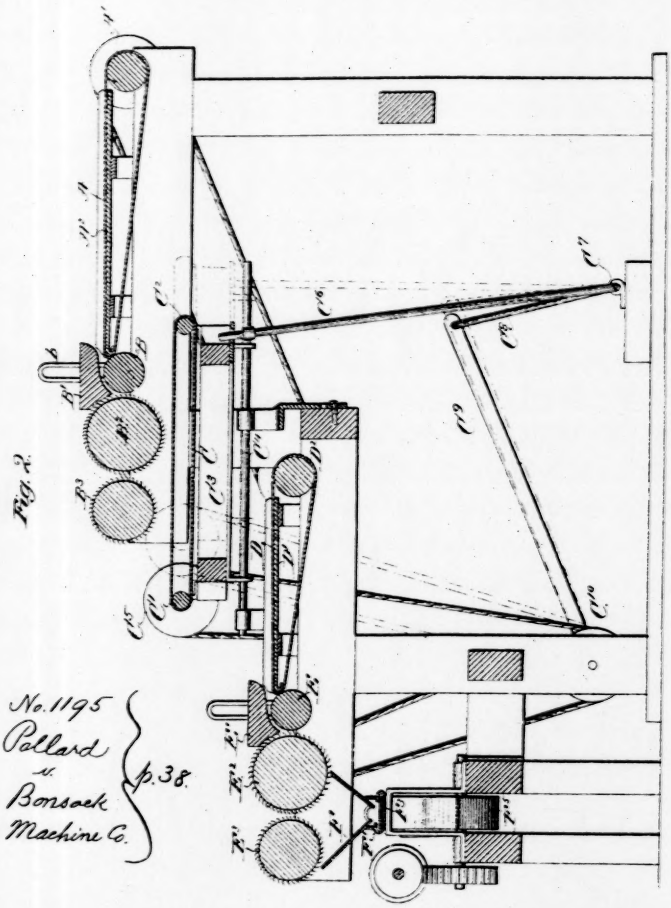
Inventor.
J. A. Bonsack
by Munn & Co
Attorneys.

(Model.) 5 Sheets—Sheet 2.

J. A. BONSACK.

Cigarette Machine.

No. 238,640. Patented March 8, 1881.



No. 1195 Pollard v. Bonsack Machine Co. p. 38.

Witnesses.
John F. C. Brinkerhoff
Edw. W. Byrn.

Inventor
J. A. Bonsack
By Munn & Co
Attorneys.

the tobacco as it is transferred from one belt to another, to which end a reciprocating carrier or spreader is employed; fourthly, in the peculiar means for rolling the tobacco into a filler and then wrapping and pasting the paper around it; fifthly, in devices for distributing and applying paste, operating, in connection with the wrapping-tube, to apply paste to the edge of the slip of paper to cause it to adhere around the roll of tobacco; and, sixthly, in a peculiar construction and arrangement of knife for cutting off the continuous roll into cigarettes of definite lengths, all as hereinafter more fully described.

For the sake of greater clearness I will commence to describe the machine at its feed end and follow it through in the normal direction of movement of the materials operated upon. I shall not describe any particular form of frame-work, as it is obvious that this must be made to conform to the construction and relation of the working parts, and may be varied without departing from my invention.

A, Figs. 1 and 2, is the first feed-belt, upon which the shredded tobacco is placed by hand or otherwise. This belt passes around a roller, A′, at the back end of the machine, then over a sheet-metal table, A^2, having upturned sides to hold the tobacco on and keep the belt in place, and at its front end is strained or stretched against a curved edge of the table, so that it may approach close to and rest well nigh the top of the first feed-roller, B, to secure the better delivery of the tobacco to the roller. This belt is preferably spaced into transverse divisions of equal size, and over each of these divisions is scattered, by hand or otherwise, an equal weight of tobacco, so that equal areas of the belt will always have delivered to them an equal quantitity of tobacco, and there will be no danger of feeding either too much or too little stock. As the tobacco is fed from the first belt, A, it passes first between the roughened surface-roller B and the concave B′, then is delivered to a roller, B^2, clothed with card-cloth, and is then stripped from B^2 by a stripping-roller, B^3, whose card-teeth are arranged to throw the tobacco from the
42½ roller B^2 down upon a carrier, C, which delivers it to another feed-belt, D. The object of the concave B′ is to hold the tobacco well down upon the roller B until the latter is most nearly tangential to the roller B^2, thereby preventing the tobacco from being pulled over in clots or bunches, and preventing it also from stringing across from the periphery of B to B^3 and breaking or sticking irregularly upon the surface of the card-teeth. The concave, it will be seen, by filling the space between the rollers B and B^2, causes the card-teeth to take the tobacco uniformly and press the latter well down upon said card-teeth. This concave is adjusted to or from the rollers by set-screws *a* in vertical slots or guides *b*.

The carrier C is made in the form of an endless belt revolving around rollers C′ C^2, which are journaled in bearings in a frame, C^3, which slides on guide-rods C^4, fixed to the frame-work. This endless belt of the carrier receives the tobacco from the stripper above and delivers it to the second feed-belt, D, below, and it has a rotary motion imparted by pulley C^5, and a reciprocating motion, which is

imparted to the carriage or frame through the arm C^6, extending from rock-shaft C^7, which is operated by a crank, C^8, and connecting-rod C^9, from a prime moving-wheel, C^{10}. The object of the reciprocating carrier, interposed between the discharge end of one feed-belt, A, and the receiving end of the other feed-belt, D, is to secure a more uniform distribution of the tobacco and the more perfect disintegration of agglomerated masses, so that the filling for the cigarettes may be more uniform. This the reciprocating movement more perfectly accomplishes, for, if there be a lump, clot, or agglomerated mass of tobacco when it is dropped off the end of the carrier, instead of being dumped on the second feed-belt, D, in a single spot, it is strewn over the surface of the same a distance equal to the reciprocating movement of the carrier. I do not confine myself strictly to the peculiar form of reciprocating carrier or spreader, as various modifications of it may be made.

The second feed-belt, D, is arranged on a flanged table, D′, and passes around a roller, D^2, at the back end, and around a curved edge of the table at the front end, and delivers to a roughened surface roller, E, concave E′, card-cloth roller E^2, and stripper E^3, which set of devices correspond to the first-described set A B B′ B^2 B^3, and serve to further even and distribute the tobacco, it being very necessary that the tobacco should be perfectly uniform in its distribution, so as to make the cigarette all of the same transverse dimensions. The stripping-roller E^3 delivers the tobacco to a hopper, F, which has a longitudinal outlet in its bottom, opening into a subjacent trough, F′, at right angles to the line of movement of the feed-belts, which trough is extended in a straight line in the form of a compressing tube, F^2, Figs. 3 and 1. Through this trough, and also through the compressing-tube F^2, passes the roll-making belt F^3, which latter passes in at one end of the trough, receives the tobacco upon it, then passes into the compressing-tube, where the belt is rolled up longitudinally and the tobacco compressed into a roll therein, after which the tobacco roll is delivered to the wrapping devices, and the belt returns around a guide, F^4, passes thence around a pulley, F^5, thence back over a pulley, F^6, and then to the entering end of the trough again. This trough has its edges curved upwardly, so as to turn up the edges of the belt to centralize the tobacco thereon, and tapers with a gradual convergence to the compressing-tube, (see Figs. 5, 6, 7,) which latter is also made in tapering form with a spiral guide groove, *c*, on one side that receives the lapping edge of the belt, (see Fig. 7,) which groove, as it nears the end of the tube, opens in the form of a longitudinal flange or lip, c^2, (see Fig. 6,) which allows the belt to gradually straighten out laterally again. As the tobacco on the belt passes through the compressing-tube it will be seen that it is compressed into a rope-like form, (see Fig. 4,) which constitutes the filler of the cigarette, about which the paper is to be subsequently wrapped and pasted.

With respect to the operation just described, I would state that I am aware that it is not new to feed tobacco on a belt, then pass the belt through a tapering tube, to curl up the belt and roll the tobacco into a continuous filler. Heretofore, however, the tapering tube has

been made without a spiral groove terminating in a longitudinally-slitted and flanged end, and hence a belt could only be used whose transverse dimensions were equal to the circumference of the cigarette, and such width of belt is entirely insufficient to receive a proper quantity of tobacco without allowing the tobacco to extend over the edges of the belt and be caught between the edges when curled up. Now by making my tapering tube with a spiral groove, *c*, leading from the side guide of the trough F′ and terminating in a longitudinally-slitted and flanged section, c^2, I am enabled to use a greater width of belt than the circumference of the cigarette, since the belt is curved upon one side principally, and the groove *c* and flanged opening c^2 receives the lap of the belt and causes the filler to be rolled tightly at one edge of the belt, as shown in Figs. 5, 6, and 7.

The belt F^3, after passing around the guide F^4, delivers the continuous roll of tobacco to a set of paper wrapping and pasting devices consisting of a trough, G, (see Figs. 3 and 4,) wrapping-tube G′, and another endless belt G^2. This belt G^2 carries both the paper strip and the compressed tobacco-roll, and it passes first into the trough G, then through wrapping-tube G′, then around pulley G^3 and over pulley G^4 back to a guide, G^5, and then into the trough again. The paper ribbon or strip H is wound upon a spool, H′, and it passes up around the guide G^5 on top of the belt G^2 and
43 just beneath the belt F^3, and as soon as it gets into the trough G it receives the tobacco roll R, Fig. 4, upon it, and this roll and the subjacent paper strip and belt G^2 then pass together into the tapering wrapping-tube G′. To prevent the tobacco roll from choking as it passes into the wrapping-tube, a positive feed is given to it just as it passes from the trough to the tube, by means of a toothed wheel, H^2. Now, as the tobacco roll and paper strip pass on the belt into the trough the curved edges of the latter give the incipient curve to the paper, and after they have entered the tapering tube the curving and wrapping of the paper around the roll proceed upon one side only, by reason of the spiral guide-groove *a*′, Fig. 8, for the edge of the belt. As soon as the complete circumference is made the guide-groove *a*′ opens in the form of a longitudinal flange or lip *b*′, which allows the upper or lapping edge of the paper to be exposed long enough to receive paste on its underneath edge from a paste wheel or brush, (shown in Fig. 10,) after which the tube closes again, as in Fig. 9, to force the pasted and lapping edge down upon the body of the cigarette.

In order to permit the pasting to be successfully accomplished the paper strip H must be wider than the belt by the distance of the lap in the cigarette, and this increased width must be on the inner edge of the paper, (see Figs. 10 and 11,) so that when the upper and outer edge of the paper is pasted and forced down it will come in contact with the margin of the paper projecting beyond the belt, and will complete the paper wrapper instead of lapping down with its pasted edge upon the edge of the belt.

In defining more clearly the novelty of the feature just described, I would state that heretofore the paper and tobacco roll have been carried through the pasting-tube unassisted by a belt. My novelty

consists in using an independent belt for this purpose, which is of less width than the paper strip, the trough G being made with double guides on one side, to accommodate this difference, as shown in Fig. 11½, so as to make the paper lap on the proper side, and also in the positive feed-wheel and in the peculiar construction of the spirally-grooved and flanged tube, as heretofore described.

For applying the paste a soft-rubber disk, Fig. 13, soft-rubber toothed wheel, Figs. 14 and 15, wooden disk, or brush I, Figs. 16, 3, and 10, is arranged in such a plane and at such proximity to the flange *b'* of the wrapping-tube that it strikes against the underneath edge of the paper strip resting against said flange. This paste wheel or brush is rotated by a belt, as shown, at right angles to and in contact with a concaved wheel, I^2, Fig. 3, arranged on a horizontal shaft, I^3, driven by suitable gear or belting, as shown. Vertically above the wheel is arranged a paste-reservoir, I^4, sustained by an upright frame, I^5, in which reservoir is a screw-plunger, I^6, which is gradually forced down by the threads of the plunger-stem to force the paste out the lower end of the reservoir onto the paste-wheel I^2. This plunger is rotated by a worm-wheel, I^7, which is fixed to the stem of the plunger, so as to revolve rigidly with it, but permit loose longitudinal movement to allow for the descent of the plunger. This worm-wheel meshes with and is driven by a worm, I^8, on a horizontal shaft carrying a pulley, which latter is connected to the shaft below by a belt, I^9. At the lower end of the paste-reservoir I preferably place a netting to cut up the lumps in the paste.

After the cigarette is rolled, wrapped, and pasted it passes out in a continuous roll, and it enters a holding-tube, J, Figs. 3 and 1, which is arranged in line with the wrapping-tube, and at the outer edge of which a knife passes to cut the cigarette into definite lengths. As the issuance of the continuous cigarette is very rapid a very quick movement in the knife is required to prevent the cigarette from doubling up and bursting during the passage of the knife by abutting against the same. A very clear, sharp, positive cut is also desirable to avoid ragged ends on the cigarette. For this purpose I have devised the following special cutting devices:

J^7 is a horizontal shaft arranged in bearings above the holding-tube, and having a crank-arm, J', carrying an elongated tubular bearing, J^2. In this tubular bearing is arranged a short shaft, J^3, carrying at one end a sharp rotary cutting-disk, J^4, arranged in the plane of the outer end of the holding-tube, while at the other end a friction or gear wheel, J^5, is fixed, which runs upon a segmental track, J^5, just as the cutting-disk comes in contact with the cigarette-roll, and whose function is to cause the cutting-disk to revolve in the opposite direction to the movement of the crank carrying it, thus giving a double motion and a shear cut which severs the cigarette smoothly.

To secure the rapid passage of the cutting-disk past the cigarette, to give clearance to the issuing end of the newly-made section, I cause the cutting-disk to pass the cigarette at a very high speed, while it passes through the balance of the revolution at a reduced speed. This I accomplish by gearing the shaft J^7 (see Figs. 1 and

been made without a spiral groove terminating in a longitudinally-slitted and flanged end, and hence a belt could only be used whose transverse dimensions were equal to the circumference of the cigarette, and such width of belt is entirely insufficient to receive a proper quantity of tobacco without allowing the tobacco to extend over the edges of the belt and be caught between the edges when curled up. Now by making my tapering tube with a spiral groove, *c*, leading from the side guide of the trough F′ and terminating in a longitudinally-slitted and flanged section, c^2, I am enabled to use a greater width of belt than the circumference of the cigarette, since the belt is curved upon one side principally, and the groove *c* and flanged opening c^2 receives the lap of the belt and causes the filler to be rolled tightly at one edge of the belt, as shown in Figs. 5, 6, and 7.

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43 just beneath the belt F^3, and as soon as it gets into the trough G it receives the tobacco roll R, Fig. 4, upon it, and this roll and the subjacent paper strip and belt G^2 then pass together into the tapering wrapping-tube G′. To prevent the tobacco roll from choking as it passes into the wrapping-tube, a positive feed is given to it just as it passes from the trough to the tube, by means of a toothed wheel, H^2. Now, as the tobacco roll and paper strip pass on the belt into the trough the curved edges of the latter give the incipient curve to the paper, and after they have entered the tapering tube the curving and wrapping of the paper around the roll proceed upon one side only, by reason of the spiral guide-groove *a*′, Fig. 8, for the edge of the belt. As soon as the complete circumference is made the guide-groove *a*′ opens in the form of a longitudinal flange or lip *b*′, which allows the upper or lapping edge of the paper to be exposed long enough to receive paste on its underneath edge from a paste wheel or brush, (shown in Fig. 10,) after which the tube closes again, as in Fig. 9, to force the pasted and lapping edge down upon the body of the cigarette.

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consists in using an independent belt for this purpose, which is of less width than the paper strip, the trough G being made with double guides on one side, to accommodate this difference, as shown in Fig. 11½, so as to make the paper lap on the proper side, and also in the positive feed-wheel and in the peculiar construction of the spirally-grooved and flanged tube, as heretofore described.

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To secure the rapid passage of the cutting-disk past the cigarette, to give clearance to the issuing end of the newly-made section, I cause the cutting-disk to pass the cigarette at a very high speed, while it passes through the balance of the revolution at a reduced speed. This I accomplish by gearing the shaft J^7 (see Figs. 1 and

12) to a horizontal actuating-shaft, K, by means of the eccentric and differential gear-wheels K′ K², so relatively arranged that when the cutting-disk is passing the holding-tube the longer side of wheel K′ is at that time acting upon the short side of K², as in Fig. 12, to give an increased leverage for a rapid movement, while during the rest of the revolution the relation of the wheels is reversed for a slower motion.

As the cigarettes are cut into definite lengths they drop down a chute, L, to a traveling belt, L′, and are counted in the following way: This belt is provided with spacing-plates *f*, which divide the belt into equal sections, and said belt is distended about 43½ rollers L² L³, one of which has a ratchet-wheel, L⁴. Over this ratchet-wheel plays a pawl, L⁵, held in an arm connected to the axis of the ratchet-wheel, and which pawl is vibrated by connection with a pitman, L⁶, which at its upper end is connected to a crank on the knife-driving shaft. Now, it will be seen that at every revolution of the knife and cutting off of a cigarette the ratchet-wheel is moved one tooth and the belt caused to travel one space, and as the belt is divided off into aliquot spaces formed into groups by the division-plates it is only necessary to know the number of teeth required to move the belt from one division-plate to the next to know how many cigarettes have been deposited upon the belt between said plates, and these numbers are just sufficient for a package of cigarettes.

In the description of the working parts of my machine I have not specifically referred to the driving belts, shafts, and countershafts for actuating the various parts, for the reason that this has no special reference to my invention, and various other driving mechanism besides the system of belts shown may be supplied by the mechanic in more or less modified forms, to suit the varying conditions of use of the machine.

In modifying my invention I may make the following changes:

In order to make the feed part of the machine deliver into the cigarette-making portion (set at right angles) the interposed hopper F causes the feed part of the machine to be placed at an inconvenient altitude. I may, therefore, for the sake of bringing the feed-belt into more convenient position, dispense entirely with the hopper F and substitute therefor a horizontal belt to transfer the tobacco to the subjacent trough.

I may also find it desirable to use a different form of knife for cutting off the cigarette, such, for instance, as shown in Fig. 17, in which two curved shear-blades are attached to disks that simply revolve, and which shear-blades come together upon opposite sides of the cigarette.

I may also arrange the knife so as to have a lateral movement, or a movement in line with the feed of the cigarette-roll, so as to compensate for the continuous feed of the roll and prevent the roll from feeding up against the knife and bending, bursting, or doubling up while the knife is cutting.

Having thus described my invention, what I claim as new is—

1. A feed device for a cigarette-machine, consisting of an endless

traveling belt, a roller distending the outer end of this belt, and a subjacent table having a curved lip for distending the other end of the belt, combined with the receiving-roll B, and situated above the horizontal axis of the latter, as shown and described.

2. A device for transferring, carding, and distributing the tobacco in a cigarette-machine, consisting of a roughened-surface feed-roller, a roller covered with card-cloth, arranged beside the first, a concave fitting down into the space above the tangential point of these rollers, and a stripping-roller, all combined with each other and with a feeding device, substantially as shown and described.

3. The combination, with a traveling receiving-belt, D, of a reciprocating carrier and operating mechanism, the said carrier being situated above said belt and adapted to transfer the tobacco, by a spreading or scattering action, upon the same, substantially as described.

4. The combination, with a traveling receiving belt, D, of a reciprocating frame situated over it and carrying an endless transferring-belt, C, and mechanism for reciprocating said belt, substantially as described.

5. In a cigarette-machine which rolls a continuous cigarette in an endless belt by passing through a tapering tube, the combination of an open trough having side guides for the belt, and a tapering tube forming a continuation of the trough, and having a spiral groove extending from one of the side guides of the trough, to allow the belt to be curled up upon one side more than it is upon the other, as and for the purpose described.

6. In a cigarette-machine which rolls a continuous cigarette in an endless belt by passing through a tapering tube, the combination of an open trough having side guides for the belt, a tapering tube having a spiral groove extending from one of said side guides, and a terminal section to the tapering tube, having its edges lapped past each other, but not united, so as to form a flange continuous with the spiral groove, substantially as and for the purpose described.

7. In a cigarette-machine which rolls a continuous cigarette in an endless belt by passing through a tapering tube, the combination of an open trough having side guides for the belt, a tapering tube having a spiral groove extending from one of the side guides of the trough, and a terminal section having its edges separated to form a flange, b', to give access to the paste-wheel and then closed again, as and for the purpose described.

8. In a cigarette-machine, the combination, with an endless belt and tapering tube for forming the tobacco roll or filler, of a tapering tube and pasting device and a second independent endless belt made narrower than the paper strip and arranged to carry the tobacco roll directly through the pasting-tube, substantially as and for the purpose described.

9. The combination, with the belt and paper wrapping-tube having slit with flange b', of a pasting wheel or brush, I, a right angular paste-delivering wheel, I^2, a paste-reservoir, I^4, located above the same, and having a screw-plunger, and the worm-gears I^7 I^8 actuating the plunger to force out the paste, as described.

10. The cutting device consisting of a holding-tube, J, circular knife J^4, and mechanism, substantially as described, for giving to said knife an intermittent revolution about its own axis, and a secondary revolution about an independent axis, as described.

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11. The combination, with the revolving cutting-knife, of a set of differential gears and suitable driving mechanism for actuating the knife with a more rapid movement while cutting than during the rest of its stroke, as set forth.

12. The combination, with the holding-tube J, of the shaft J^7, having arm J', tubular bearing J^2, shaft J^3, cutting-disk J^4, driving-wheel J^5, and segmental track J^5, substantially as and for the purpose described.

The above specification of my invention signed by me this 14th day of August, 1880.

JAMES ALBERT BONSACK.

Witnesses:
EDW. W. BYRN.
CHAS. A. PETTIT.

48

UNITED STATES PATENT OFFICE.

JAMES A. BONSACK, of Bonsack's, Virginia.

Cigarette Machine.

Specification forming part of Letters Patent No. 247,795, dated October 4, 1881; application filed June 21, 1881. (No model.)

To all whom it may concern:

Be it known that I, James Albert Bonsack, of Bonsack's, in the county of Roanoke and State of Virginia, have invented a new and improved cigarette-machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

(Here follow diagrams marked pp. 45, 46, & 47.)

Figure 1 is a front elevation of the machine, partly in section. Fig. 2 is a vertical section through the line *x x* of Fig. 1, looking in the direction of the arrow. Fig. 3 is a plan view of the devices for forming the cigarette roll or filler. Figs. 4 and 5 are enlarged vertical cross-sections of the same through the lines *y y* and *z z*, respectively, looking in the direction of the arrows. Fig. 6 is an end view of the machine, showing devices for cutting off the cigarette; Fig. 7, a plan view of these devices; Fig. 8, a side view of the same, looking in the direction of the arrow in Fig. 7; and Fig. 9, a view showing the alternating arrangement of teeth in the rolls and belt.

My invention relates to certain improvements upon the cigarette-machine for which letters patent of the United States were granted me March 8, 1881, No. 238,640. This machine operated on the gen-

45

(No Model.) 3 Sheets—Sheet 1.

J. A. BONSACK.

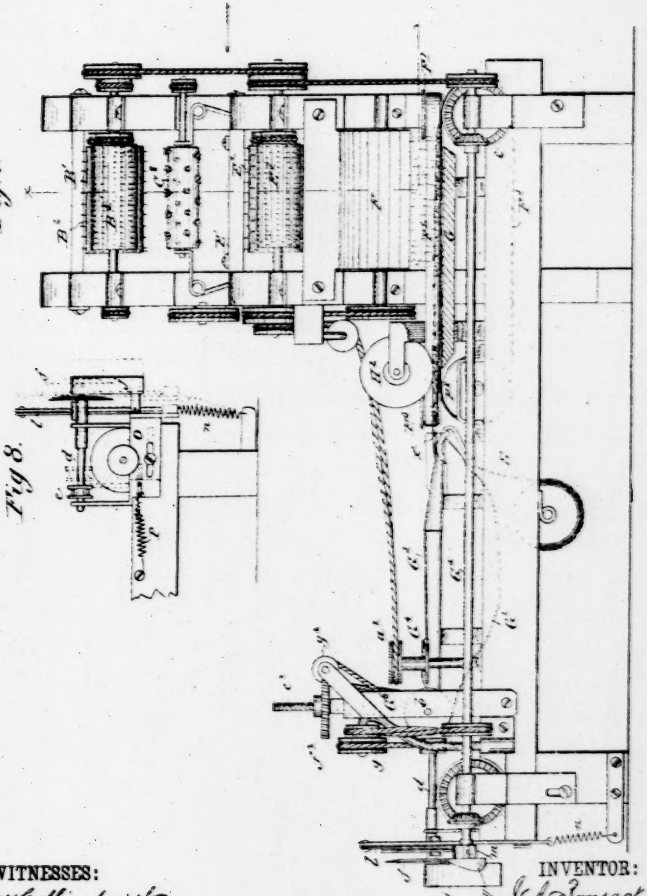
CIGARETTE MACHINE.

No. 247,795. Patented Oct. 4, 1881.

No. 1195. Pollard v. Bonsack machine Co. } p. 45.

Fig 1.

Fig 8.



WITNESSES:

W. W. Hollingsworth

Edw. W. Byrn

INVENTOR:

J. A. Bonsack

BY Munn & Co

ATTORNEYS.

(No Model.)

46

3 Sheets—Sheet 2.

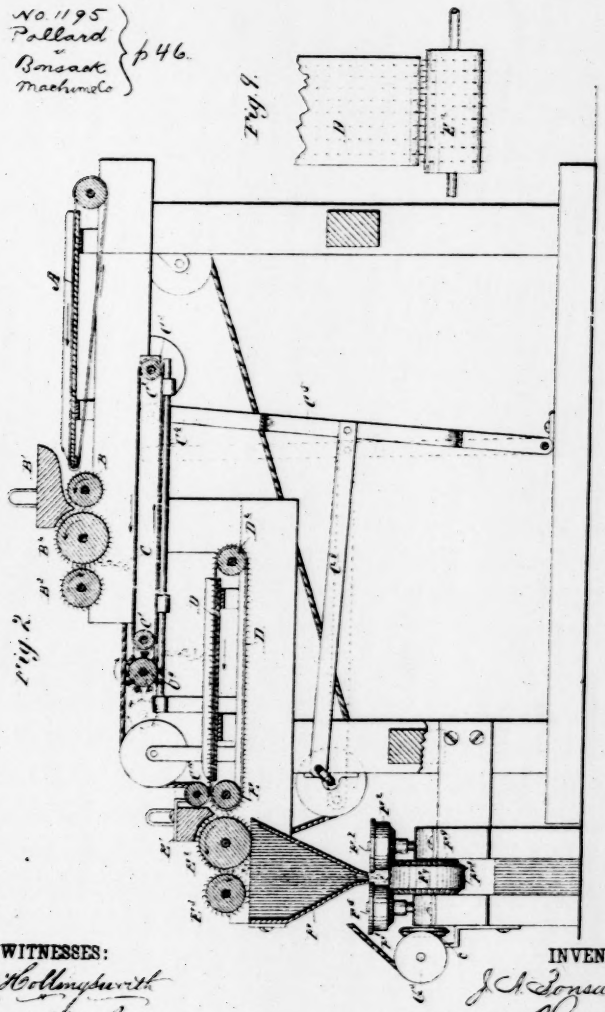
J. A. BONSACK.

CIGARETTE MACHINE.

No. 247,795

Patented Oct. 4, 1881.

No. 1195 Pollard v. Bonsack Machine Co. p 46.



WITNESSES:

W. W. Hollingsworth

Edw. A. Byrn.

INVENTOR:

J. A. Bonsack

BY Munn & Co

ATTORNEYS.

(No Model.) 3 Sheets—Sheet 3.

J. A. BONSACK.

CIGARETTE MACHINE.

No. 247,795. Patented Oct. 4, 1881.

No. 1195 Pollard v. Bonsack Machine Co. p47.

Fig. 6.

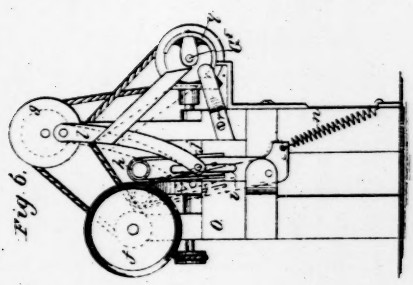


Fig. 7.

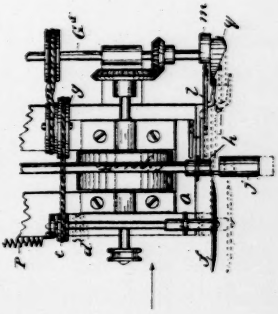


Fig. 3.

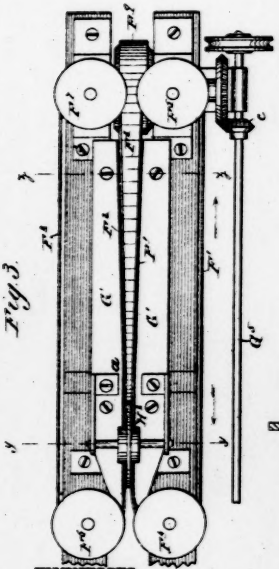


Fig. 5.

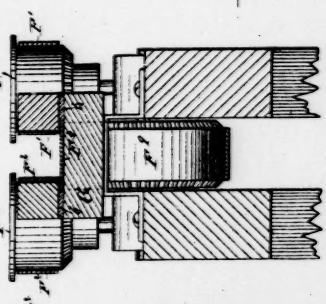
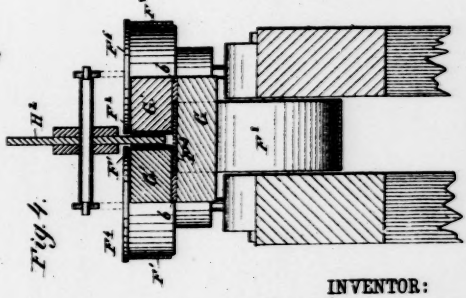


Fig. 4.



WITNESSES:

W. W. Hollingsworth

Edw. M. Byrn

INVENTOR:

J. A. Bonsack

BY Munn & Co

ATTORNEYS.

eral principle of forming the shredded tobacco first into a continuous roll or filler, then wrapping a continuous strip of paper longitudinally around this filler, then pasting its meeting edges, and finally cutting this continuous cigarette into definite lengths and counting them. For this purpose said machine comprised a combination of a concave with rollers covered with card-cloth, and also a reciprocating belt for distributing and spreading the tobacco for a uniform and homogeneous feed; also, in a peculiarly-constructed tapering tube, having an endless belt passing through it which received the tobacco, and was curled up longitudinally as it passed through the tube to form a filler, and which filler was then delivered to another endless belt, which carried the filler and a strip of paper through another peculiar tube that wrapped the paper around the filler and held it while being pasted.

My present invention consists, principally, in means for insuring the more uniform passage of the tobacco under the concaves; in a brush mounted upon the frame of and combined with the reciprocating spreading belt for positively clearing it of the tobacco shreds, which have a tendency to adhere and interfere with the uniformity of the spreading and distributing action; also, in a presser-roller for co-operating with the concaves, and a toothed belt to prevent the tobacco from piling up in front of said concave.

It also consists in the novel construction and arrangement of the filler-forming devices, for which purpose I use three steel belts, which are arranged to form a converging trough, and all travel in the same direction and co-operate with a wheel which presses the filler into an approximately fair shape.

The invention also further consists in the improved means for cutting off the cigarette-roll into definite lengths, all of which will be hereinafter more fully described.

In the general construction of my improved machine the tobacco feeding and distributing devices are arranged, as in my prior patent, so that the travel of the stock in these devices is at right angles to the travel of the stock in the filler-forming and paper-wrapping and pasting devices. Thus Fig. 2 is a vertical longitudinal section of the tobacco feeding and distributing devices, and Fig. 1 shows an end view of the same with the filler-forming and paper-wrapping devices extending therefrom in side view.

In the drawings (see Fig. 2), A represents the first endless belt upon which the tobacco is spread by hand.

B is the feed-roller which carries the tobacco under the concave B′.

B^2 is the distributing-roller, and B^3 is a stripping-roller which takes off the tobacco from B^2 and throws it down upon the endless spreading-belt C. This belt C is distended about rollers C′ C^2, and these rollers are mounted upon a frame C^3, which slides horizontally on guide-rods C^4 from the action of a rocking arm, C^5, and connecting-rod C^9, so that while the belt travels in its endless circuit it also distributes or spreads (as shown by dotted lines) the tobacco on another subjacent belt, D, so that the tobacco does not fall on the latter in piles, all as fully described in my prior patent. The belt D

passes around rollers E D^2, and its upper section is supported
48½ by a subjacent table. E′ is a second concave; E^2, a second distributing-roller, and E^3 a second stripping-roller, which correspond in their relation and function to B′ B^2 B^3. These last rollers, E^2 E^3, discharge the tobacco into a chute, F, which delivers it to the filler-forming devices, which I will hereinafter describe.

As so far described, my improved machine does not differ materially from the corresponding construction in my prior patent. I will now proceed to describe the improvements which I have made.

I found in the old device that with plain rollers B and E underneath the concaves the tobacco would at times fail to pass under the concave, but would pile up in front of the same until the increased friction of a larger bulk compelled it to enter, when it would pass to the distributing-roller in a lump which could not be sufficiently distributed by the subsequent operation. To obviate this I cover the surface of the first roller beneath the concave with a series of teeth, which may be permanently located on the roller, as at B, or which may be located on the belt D, that passes around the roller, as shown at E. In either case the concave bears against the teeth projecting from the round surface of the roller, and the teeth or pins positively carry the tobacco beneath the concave as fast as it is fed to the same by the belt, and does not allow any tobacco to hang back or pile up in front of the concave.

At the upper concave I prefer to make the teeth directly on the roller B, so as to avoid teeth on belt A, which would be liable to prick the hand of the feeder, while at the lower concave I prefer to use a plain roller, E, and place the teeth on the belt D, that passes around the same.

Instead of using card-cloth teeth on the distributing-rollers B^2 and E^2, as in my prior patent, I also prefer to use larger and straight well-defined teeth, which are arranged in parallel rows around the cylinder about three-eighths of an inch apart, and which rows of teeth alternate with the rows of teeth on the roll B or belt D. (See Fig. 9.) Such arrangement of teeth I find effects a more perfect transfer of tobacco from one surface to the other.

As the belt C reciprocates over D to spread the tobacco on the latter, I have found that small particles of tobacco will adhere to belt C, and instead of dropping off at the end of this belt C they pass around with it, dropping tobacco through the machine, and also interfering with the regularity of the feed. To correct this I mount a rotary brush, C^8, in bearings in the end of the frame next to the delivery end of belt C, to which brush is imparted a rotary motion in the direction of the arrow, so that its action is to positively clear the belt C of all tobacco in a uniform and regular manner, which brush thus co-operates with the reciprocating belt in securing an even and uniform delivery of the tobacco to the belt D. This brush reciprocates with the frame of the endless belt C, and is to be rotated by a short band connecting with a pulley on the nearest roller, C′. Where the tobacco drops upon the toothed belt D, I have found that the masses will sometimes be sustained upon the tops of the teeth,

and when such a clot reaches the concave it is not positively drawn under the same by the teeth, as it should be. To provide for this I place just over the roller E and beside the concave E′ a presser-roller, C^{10}, which bears upon the teeth of the belt D and forces the tobacco well down between the said teeth, so as to cause the latter to positively carry the same into the concave.

I will now proceed to describe the devices for forming the evenly-distributed tobacco into a filler before receiving its wrapper.

As the tobacco is stripped from the roller E^2 it falls into the chute F, and passes in a thin sheet through a slit in the bottom of said chute into a trough composed of three metal belts, F′ F^2 F^3. (See Figs. 3, 4, and 5.) This trough is arranged immediately beneath the elongated opening in the bottom of chute F, and it extends at right angles to the general direction of the feeding and distributing devices shown in Fig. 2. The belt F′ is distended about two horizontal pulleys, F^4 F^5, which have flanges at their upper edges to hold the belt down, while F^2 is distended about corresponding horizontal pulleys F^6 F^7, similarly equipped with flanges. The belt F^3 passes around two vertical pulleys, F^8 F^9. The adjacent sides of the two belts F′ F^2 form the two vertical walls of the trough, while the upper side of belt F^3 forms the bottom of said trough. Backing-strips of wood G G′ G′ are placed on the outer sides of those sections of the belt that form the trough, and re-enforce the trough so as to make its walls unyielding as against pressure from within. These strips also serve to guide the belts and distend them to the proper shape. Thus they cause the belts F′ F^2 to converge from pulleys F^5 and F^7 to a point, *a*, Fig. 3, then run parallel for a short distance, and thence diverge to the pulleys F^4 and F^6. The two belts F′ F^2 are guided by the flanges of the pulleys at the top and the belt F^3 at the bottom, (see Figs. 4 and 5,) and the belt F^3 is guided by metal strips *b b*, inserted between the backing-strips G and G′.

At the point *a*, where the two sides of the trough are parallel, a disk or wheel, H^2, is arranged, which wheel exactly fits between the sides of the trough, and has a straight or square periphery that forces the tobacco down to cause it to be compressed into an approximately square filler. This disk or wheel H^2 is mounted in bearings above the trough, and it rotates passively by the feeding of the tobacco underneath of the same. Instead of using this disk or wheel for this purpose, I may use a short supplemental belt with a roller on the top of it; or I may simply employ a spring-finger for pressing down the tobacco. As the tobacco falls into this trough it is carried along by the movement of the steel belts forming such trough, which tobacco is gradually compressed by the convergence of the trough and the action of the disk H^2 to form a continuous filler, x^3, Fig. 1. For giving motion to these two belts I form the pulleys F^5 and F^7 with bevel-teeth on their lower edges, (see Figs. 2 and 3,) and these I make to engage with bevel-teeth on the opposite sides of the pulley F^9, carrying the lower belt, F^3, so that all of these steel belts travel with the same rate of speed. Instead of gearing these belts to be driven at the

49

wide end of the trough, as shown, they may be arranged to be driven from the narrow end by substantially the same mechanism. The pulley F^9 is arranged upon a shaft that derives motion from long shaft G^5, through a bevel-gear, *c*, Figs. 1 and 3. As the filler or compressed line of tobacco issues from the end of the steel-belt trough, as at x^3, Fig. 1, it is delivered upon the strip of paper H, and with the paper is carried by endless belt G^2 through the wrapping-tube G^3, where it is operated upon by the paste-wheel G^4, which is supplied with paste through devices G^6, just as is described in my prior patent.

With respect to this feature of my invention which I have just described, I would state that I am aware that three endless belts have heretofore been used as a feeding-trough in a cigar-machine, and that backing-strips have also been used behind the belts.

My invention consists in making the trough a convergent trough for compressing the tobacco and providing a pressing-disk or other device operating in the open side of the trough at the point of greatest convergence to complete the formation of a filler.

My invention is also distinctive in making the backing-strips with double inclines, which distend the belts so that in a portion of their travel they are convergent, and during the other portion where the pressing-disk acts between them they are parallel. I also consider my mode of gearing the three belts together for equal and uniform travel a meritorious feature.

For cutting the cigarette into definite lengths I give to the cutting devices a secondary movement in the same direction with the cigarette as it emerges from the machine. The object of this is as follows: When the machine is in rapid action the cigarette emerges at quite a rapid rate, and in the interval in which it is being cut into lengths it is practically stopped at its cut end in its progressive movement, but is still feeding from the machine, and this has a tendency to double up the cigarette-roll and burst open the freshly-pasted edges. This is entirely overcome by giving to the cutting device while in cutting action a movement along with the cigarette. I will now proceed to describe particularly the devices for accomplishing this result.

Just to one side of the end of the wrapping and pasting belt from which the cigarette comes is arranged a shaft, *d*, (see Fig. 7,) carrying at one end a pulley, *e*, and at the other end a cutting-disk, *f*. The pulley *e* of the shaft is connected by belts and pulley *g* with a pulley on the long shaft G^5, through which a rapid rotary action is given to the cutting disk or knife.

In line with the cigarette and encompassing the same is a tubular holder, *h*, carried upon the top of arm *i*, which is pivoted at its lower end, and carries also an inverted U-shaped piece, *j*, which acts as a guard or holder for the cigarette that is being cut off. The tubular holder *h* passes on one side of the cutting-disk and the guard *j* on the other. Heretofore the cigarette has been cut off by moving the knife against the cigarette, which necessitates a quick movement of a heavy and cumbrous mechanism. Instead of moving the knife to the cigarette I bring the cigarette to the knife by projecting the

holder *h* toward the disk, as shown in dotted lines, Fig. 6. For this purpose a bar, *l*, is pivoted at its top, and has two branches at its lower end, one of which has a slotted connection with the arm *i*, carrying the cigarette-holder, and the other of whose branches is operated upon by a cam, *m*, (see Fig. 7,) on the long shaft G^5 to project the cigarette and its holder toward the knife, the said holder being in turn withdrawn by a spring, *n*, acting on bar *i*. Now, to cause the knife to have a movement in line with the cigarette while it is being cut, the rotary knife, its shaft, the cigarette-holder, and its moving arms are all mounted upon a movable or sliding carriage, O, (see Figs. 8 and 7,) which rests upon the main frame and slides back and forth in line with the travel of the cigarette. This carriage is drawn back by a spring, P, and when the knife is cutting is moved forward, as shown in dotted lines, by a cam, *q*, on the end of the shaft G^5, which bears against a projection, *r*, on the carriage, O, and throws it out at the proper time.

It will be seen that I have not described any particular framework for carrying the parts of my machine, nor any particular belt or gearing connections for giving the proper motion to the several movable parts. These may be varied at will, and can easily be supplied by the mechanic to suit the conditions of the case.

Having thus described my invention, what I claim as new is—

1. In a cigarette-machine, the combination with a toothed distributing-roller and a double concave, of a roller, located at the entering side of the concave, and having teeth upon its periphery which co-operate with the concave for feeding the stock to the distributing-roller and preventing it from piling up on the outside, as set forth.

2. The combination, with the endless spreading-belt C and its reciprocating frame or carriage, of a rotary brush, C^8, located
49½ at the delivery end of said belt and mounted upon its carrying-frame, so as to reciprocate with it, as described

3. The combination, with the distributing toothed roller E^2, the concave E′, and roller E, of the toothed belt D, passing around the roller E, between the same and the concave, substantially as and for the purpose described.

4. The combination, with the toothed roller E^2, concave E′, the roller E, and the toothed belt D, passing around roller E, as described, of a presser-roller, C^{10}, for forcing the tobacco down between the teeth of the belt before passing beneath the concave, as described.

5. A device for forming a continuous cigarette-filler, consisting of three endless belts, two of which are arranged convergently to form a tapered trough, as described, and a pressing device acting in the open side of the trough at the point of greatest convergence, all combined substantially as and for the purpose described.

6. The combination, with the three endless belts, of the backing-strips G′ G′, having their opposing faces at one end arranged parallel to receive the pressing-disk, and their opposing faces at the other end arranged convergently to effect the compression of the tobacco, substantially as and for the purpose described.

7. The combination, with three endless belts arranged to form a

trough, as described, of the two active pulleys F^5 F^7, distending the side belts, and the active pulley F^9, distending the bottom belt, and geared by bevel-teeth directly to the two pulleys F^5 F^7, for equal movement for the three belts, substantially as described.

8. The combination, with the rotary cutting-disk, the carriage carrying the same, and means for moving the carriage parallel to the feed of the cigarette, of a holder for the cigarette mounted upon the same carriage, and means for projecting said holder and the cigarette toward the relatively stationary cutting-disk, substantially as and for the purpose described.

9. The combination, with the rotary cutting-disk, maintained at a constant distance from the line of feed of the cigarette, of a holder for the cigarette, and mechanism, substantially as described, for projecting said holder and cigarette toward the cutting-disk to cut the cigarettes into lengths, substantially as described.

JAMES A. BONSACK.

Witnesses:
EDW. W. BYRN.
CHAS. A. PETTIT.

50 Ex. D.

(2-175.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the records of this office of the letters patent granted Edward T. Pollard July 22, 1884, number 302,521, for improvement in cigarette machines.

Seal Patent Office, United States of America.

In testimony whereof I, C. E. Mitchell, Commissioner of Patents, have caused the seal of the Patent Office to be affixed this 15th day of April, in the year of our Lord one thousand eight hundred and ninety-one, and of the Independence of the United States the one hundred and fifteenth.

C. E. MITCHELL,
Commissioner.

51 Ex. D.

(2-155.)

No. 302,521.

THE UNITED STATES OF AMERICA:

To all to whom these presents shall come:

Whereas Edward T. Pollard, of Lynchburg, Virginia, has presented to the Commissioner of Patents a petition praying for the grant of letters patent for an alleged new and useful improvement in cigarette machines, a description of which invention is con-

tained in the specification, of which a copy is hereunto annexed and made a part hereof, and has complied with the various requirements of law in such case made and provided; and

Whereas, upon due examination made, the said claimant is adjudged to be justly entitled to a patent under the law:

Now, therefore, these letters patent are to grant unto the said Edward T. Pollard, his heirs or assigns, for the term of seventeen years from the twenty-second day of July, one thousand eight hundred and eighty-four, the exclusive right to make, use, and vend the said invention throughout the United States and the territories thereof.

Seal Patent Office, United States of America.

In testimony whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the city of Washington this twenty-second day of July, in the year of our Lord one thousand eight hundred and eighty-four, and of the Independence of the United States of America the one hundred and ninth.

M. L. JOSLYN,
Acting Secretary of the Interior.

Countersigned:
BENJ. BUTTERWORTH,
Commissioner of Patents.

54 UNITED STATES PATENT OFFICE.

EDWARD T. POLLARD, of Lynchburg, Virginia.

Cigarette-Machine.

Specification forming part of Letters Patent No. 302,521, dated July 22, 1884. Application filed September 14, 1883. (No model.)

To all whom it may concern:

Be it known that I, Edward T. Pollard, a citizen of the United States, residing at Lynchburg, in the county of Campbell and State of Virginia, have invented certain new and useful improvements in cigarette-machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in the means for guiding the tobacco to the filler-forming devices, and to improvement in the means for guiding the wrapper around the filler and into the closing-up and finishing tube. The wrapper-strip has heretofore been guided to the closing-up and finishing or shaping tube through a tapering trough and conical guide or compressing tube having at its small end, which is connected to the closing-up tube, a longitudinal slit, on one side of which the tube-wall extends outward as

a guide and abutment for one margin of the paper strip while receiving paste, while the wall on the other side of the slit curves toward the outwardly-extending wall or lip, so as to guide the opposite edge of the paper directly to the projecting pasted margin. In such an arrangement the unpasted margin is left free and unsupported in order that it may come under the pasted margin, and for lack of support it becomes crumpled or wrinkled to such an extent that the cigarette lacks neatness of finish, and, further, the unsupported unpasted margin is liable to be bent back and torn if the wrapper travels at high speed, so that rapidity of manufacture is impossible.

The object of my invention is to overcome the disadvantages of the old form of device referred to; and to this end it consists in certain novel constructions and combinations of parts, which will be fully understood from the following particular description in connection with the accompanying drawings, in which—

(Here follow diagrams marked pp. 52 & 53.)

Figure 1 is a side elevation and partial section of the cigarette-forming and tobacco-feeding devices. Fig. 2 is a plan view of the same. Fig. 3 is a perspective view of the same. Fig. 4 is a cross-section on line *x x* of Fig. 3. Fig. 5 is a similar section on line *y y*. Fig. 6 is a similar section on line *z z*. Fig. 7 is an enlarged perspective view of a portion illustrating the relation of the guides.

The letter A indicates the guide for conveying the loose tobacco from the feed-hopper B to the tapering trough C, from which it passes to the conical or tapering compressing-tube D, and thence into the wrapper-closing tube E. These parts C, D, and E comprise the tube into which the tobacco and wrapper are fed, and in which the cigarette is formed or finished.

The conveyor or guide A consists of two side walls, *a a*, resting on a bottom plate, *a'*, which projects outwardly both ways from the side walls, and terminates at one end directly over the wide end of the trough C, and has its other end in contact with the feed-belt *b*, which carries the tobacco from the hopper in the usual manner. At each side of the entrance of the guide A is a vertical roller, *g*, and these rollers carry belts *g'*, which drive the tobacco through the guide to its discharge end, where it falls into the trough C and upon the paper strip H, which is carried longitudinally in said trough in the usual manner. The end of the bottom plate, *a'*, being in contact with the feed-belt *b*, serves to keep the same clean by scraping the tobacco therefrom, and the belts carried by the rollers, as *g*, move the tobacco along in practically uniform volume, whereas in previously-constructed machines of this class it was driven solely by the feed-belt.

The peculiarity of construction of my compressing-tube is that from its entrance or larger end of the portion D are arranged guides *d d'*, one of which, *d*, extends to the point *o*, where the wall of the tube is bent outward, as shown, to form a guide and abutment. d^2, for one margin of the paper strip, while the other guide, *d'*, con-

(No Model.) 2 Sheets—Sheet 1.

E. T. POLLARD.

CIGARETTE MACHINE.

No. 302,521. Patented July 22, 1884.

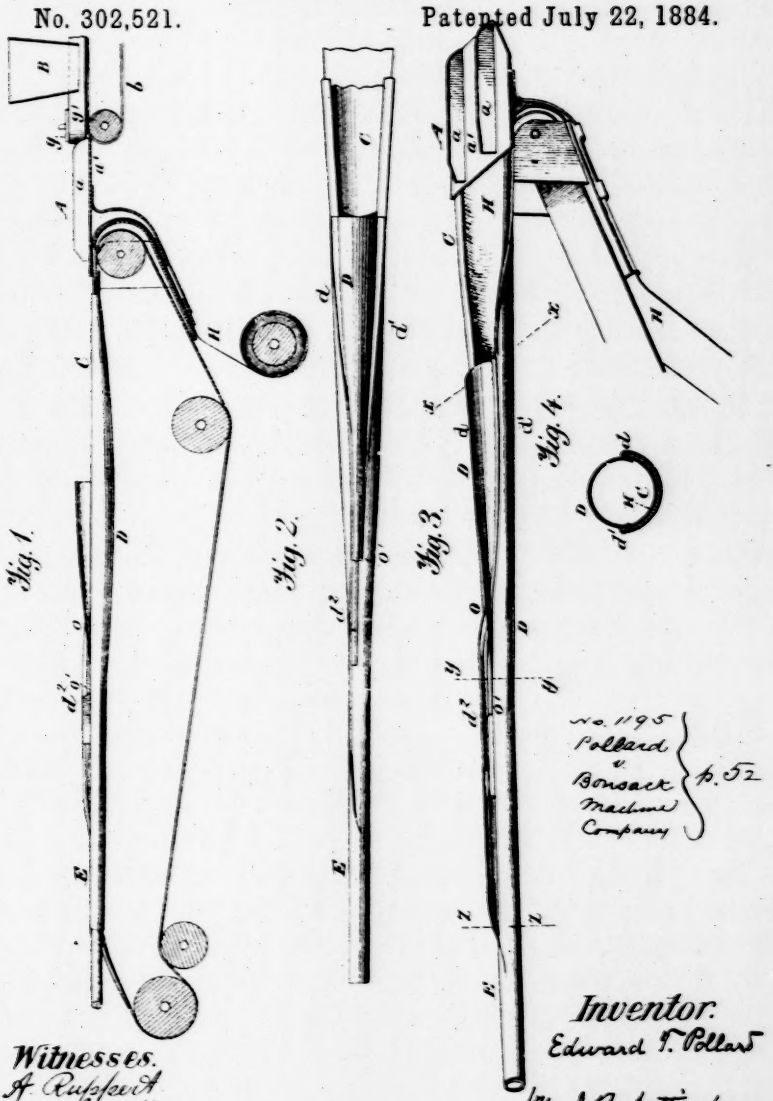


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

No. 1195 Pollard v. Bonsack Machine Company p. 52

Witnesses.
A. Ruppert
E. F. Gaddis

Inventor.
Edward T. Pollard
by J. R. Nottingham
Atty.

(No Model.) 2 Sheets—Sheet 2.

E. T. POLLARD.

CIGARETTE MACHINE.

No. 302,521. Patented July 22, 1884.

No. 1195. Pollard v. Bonsack Machine Co. p. 53

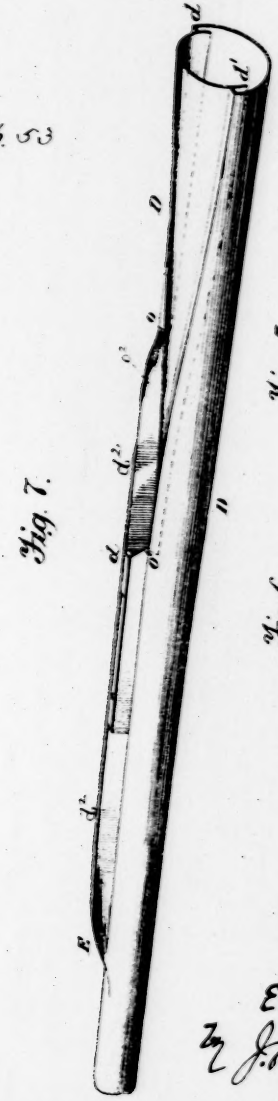


Fig. 7.



Fig. 5.



Fig. 6.

Witnesses.
A. Ruppert
E T Gaddis

Inventor:
E. T. Pollard
by J. R. Nottingham
Atty.

tinues to the point o', thus forming a guide which is closed around the edge of the paper strip, so as to support and guide the unpasted margin to almost the very point where the pasted margin is closed upon it. Between the points o and o'—that is to say, along in front of the abutment-guide—is arranged a longitudinal opening, o^2,
54½ and the wall of the guide d' passes below the plane of the guide d at this point, to allow one edge to pass under or below the other edge of the wrapper. The abutment and guide d^2 is bent down at the entrance of the closing portion E, so as to fold over the edge of the wall upon which is formed the guide d', and as the unpasted margin of the paper passes from the guideway formed by the guide d' and into the closing-tube, the pasted margin is guided down upon it, and the two are pressed together by the closing portion of the tube. The paper strip is carried along on the tube by a belt, as is usual in this class of machines, and is pasted by the ordinary means, and as my invention has no relation to improvement of the mechanism for the purposes, a detailed description of the same is deemed unnecessary. I may state, however, that such mechanism is illustrated and described in the patent of J. A. Bonsack, granted March 8, 1881, No. 238,640.

What I claim is—

1. In a cigarette-machine, a tube having two converging guides—one for each edge of the paper wrapper—one guide terminating in an abutment to hold one edge of the paper extended, and the other passing in front of and up to a slit or opening formed along the line of said abutment to force the opposite edge of the wrapper under, so that the first edge will overlap the same, as set forth.

2. The compressing-tube described, consisting of the trough C, the tapering portion D, and cylindrical portion E, the tapering portion having two converging guides for the wrapper, one guide terminating in an abutment, as d^2, and the other extending up to a longitudinal slit or opening, o^2, formed along the line of said abutment, all combined and operating as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD T. POLLARD.

Witnesses:
GEO. L. BIDGOOD.
JOSEPH A. JOHNSTON.

55 DEFENDANT'S EXHIBIT FILED WRAPPER AND CONTENTS OF POLLARD'S PATENT.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the files of this office of the file wrapper and contents in the matter of the letters patent granted Edward T. Pollard, July 22nd, 1884, Number 302,521, for improvements in cigarettes machines.

In testimony whereof I, Robert J. Fisher, acting Commissioner of Patents, having caused the seal of the Patent Office to be affixed this 27th day of August, in the year of our Lord one thousand eight hundred — ninety, and of the Independence of the United States the one hundred and fifteenth.

[Patent Office (Seal) United States of America.]

ROBERT J. FISHER,
Acting Commissioner.

Petition.

To the Commissioner of Patents:

The petition of Edw'd T. Pollard, citizen of the United States, residing at Lynchburg, in the county of Campbell, State of Virginia, prays that letters patent may be granted to him for improvements in cigarette machines as set forth in the anneded specifications.

And he hereby appoints J. R. Nottingham, of Washington, District of Columbia, his attorney, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office connected therewith.

Signed at Richmond, in the county of Henrico, and State of Virginia, this — day of September, 1883.

EDWARD T. POLLARD.

Specificatiions.

To all whom it may concern:

Be it known that I, Edward T. Pollard, citizen of the United States, residing at Lynchburg, in the county of Campbell and State of Virginia, have invented certain new and useful improve-
56 ments in cigarette machines, and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings and to the letters and figures marked thereon, which form a part of this specification.

My invention relates to improvements in the means for guiding the tobacco to the filler-forming devices and to improvement in the means for guiding the wrapper around the filler and into the closing up and finishing tube.

The wrapper strip has heretofore been guided to the closing up and finishing of shaping tube through a tapering trough and conical guide or compressing tube, having at its small end, which is connected to the closing-up tube, a longitudinal slit on one side of which the tube wall extends outward as a guide and abutment for one margin of the paper strip while receiving paste, while the wall on the other side of the slip curves toward the outwardly extending wall or lip so as to guide the opposite edge of the paper directly to the projecting pasted margin. In such an arrangement the unpasted margin is left free and unsupported in order that it may

come under the pasted margin, and for lack of support it becomes crumpled or wrinkled to such an extent that the cigarette lacks neatness of finish, and, further, the unsupported, unpasted margin is liable to be bent back and torn if the wrapper travels at high speed, so that rapidity of manufactury is impossible.

The object of my invention is to overcome the disadvantages of the old form of device referred to, and to this end it consists of certain novel constructions and combinations of parts, which will be fully understood from the following particular description in connection with the accompanying drawing, in which—

Fig. 1 is a side elevation and partial section of the cigarette-forming and tobacco-feeding devices.

Fig. 2 is a plan view of the same.

Fig. 3 is a perspective view of the same.

Fig. 4 is a cross-section on line *x x* of Fig. 3.

Fig. 5 is a similar section on a line, *y y*.

Fig. 6 is a similar section on line *z*, *z*.

In red ink.

(Marginal note.—Insert amend't A, filed February 8th, 1884.)

The letter A indicates the tobacco for conveying the loose tobacco from the feed-hopper B to the tapering trough C, from which *from which* it passes to the conical or tapering compressing tube D and thence into the wrapper-closing tube E.

J. R. N.

(Written in red ink.)

(Marginal note.—Insert amendment B, filed March 7th, 1884.)

The conveyor or guide A consists of two side walls, *a a*, resting on a bottom plate, *a'*, which projects outwardly both ways from the side wall and terminates at one end directly over the wide end of the trough C and has its other end in contact with the feed-belt *b*, which carries the tobacco from the hopper in the usual manner. At each side of the entrance of the guide A is a vertical roller, *g*, and these rollers carries belts *g'*, which drive the tobacco through the guide to its discharge end, where it falls into the trough C and upon the paper strip H, which is carried longitudinally in said trough in the usual manner. The end of the bottom plate *a'*, being in contact with the feed-belt *b*, serves to keep the same clean by scraping the tobacco therefrom, and the belts carried by the rollers, as *g*, moved the tobacco along in practically uniform volume, whereas in previously constructed machines of this class it was driven solely by the feed-belt.

The peculiarity of construction of my compressing tube is that from its entrance or larger end of the portion D [of]* are arranged guides *d d'*, one of which, *d*, extends to the point *o*, where the wall of the tube is bent outward, as shown, to form a guide and abutment, d^2, for one margin of the paper strip, while the other guide, *d'*, continues to the point *o'* (erase per amendment A filed March 7th, 1884), [being the entrance to the closing tube]* thus forming a guide which is closed around the edge of the paper

in red ink,

57

* Words enclosed in brackets erased in copy.

strip so as to support and guide the unpasted margin to almost the very point where the pasted margin is closed upon it. Insert amendment E, filed April 30, 1884.

Amendment. Mar. 7, 1884. " " " " " " " " "

The abutment and guide d^2 is bent down at the entrance of the closing [tube]* portion A E so as to fold over the edge of the wall upon which is forms the guide [lip]* d', and as the unpasted margin of the paper passes from the guide by way formed by the [lip]* guide A d' and into the closing tube the pasted margin is guided down upon it, and the two are pressed together by the closing portion of the A tube.

The paper strip is carried along on the tube by a belt, as is usual in this class of machines, and is pasted by the ordinary means, and, as my invention has no relation to improvement of the mechanism for the purposes, a detailed description of the same is deemed unnecessary. I may state, however, that such mechanism is illustrated and described in the patent of J. A. Bonsack, granted March 8th, 1881, No. 238,640.

What I claim is—

Erase & insert amendment C, filed Mar. 7, 1884.

1. The compressing [tapering]* tapering A tube having the guide (lip) d' extending [spirally]* spirally A from its entrance to its discharge end (and forming a guideway, closed at one edge, through the center length of the compressing tube), said tube having and spiral and converging opposite A and (similar) guide (lip), d, what terminates at a point where A an outwardly projecting abutment and guide d^2 on one side of a slit or opening in the tube commences, A substantially as described.

2. The combination, with the trough C and closing tube E, of the tapering compressing tube having the guide d' through its entire length (and bent to close edge of a guideway), said tube having also guide d and the abutment and guide d^2, the whole being constructed and arranged to operate substantially as described.

3. The combination, with the feed-belt b, of the guide A, A having the one edge of its bottom plate in contact with the said belt, substantially as and for the purpose set forth.

4. The combination, with the feed-belt and guide A, of the bottom driving belts g', substantially as described.

* Words enclosed in brackets erased in copy.
Words and sentences enclosed between rules erased in copy.

In testimony whereof I affix my signature in the presence of two witnesses.

EDWARD T. POLLARD.

Witnesses:
GEO. L. BIDGOOD.
JOSEPH A. JOHNSON.

Oath.

STATE OF VIRGINIA, } ss:
County of Henrico, }

Edw'*t* T. Pollard, the above-named petitioner, citizen of the United States and resident of Lynchburg, in the county of Campbell and State of Virginia, being duly sworn (or affirmed), deposes and says that he verily beli*e*ves himself to be the original, first, and sole inventor of the improvement in cigarette machine described and claimed in the foregoing specification; that the same has not been patented to him or to others, with his knowledge or consent, in any foreign country; that the same has not, to his knowledge, been in public use or on sale in the United States for more than two years prior to this application, and he does not — and does not beli*e*ve that the same was ever known or used prior to his invention thereof.

EDWARD T. POLLARD.

Sworn to and subscribed before me this 15th day of September, 1883.

[NOTARY SEAL.] J. M. SKINNER, *N. P.*

58 DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *January* 23, 1884.

E. T. Pollard, care of J. R. Nottingham, 515 7th St., present.

Subject: Cigarette machine. Filed September 14, 1883. No. 106,413.

The d*a*rawings do not clearly represent the construction of the device from the letter *o'*, Fig. 2, to E of said Fig. Two abrupt parts *parts*, which are marked in lead pencil 3 3, are seen, and it is not known what these are or what their purpose. The side *d'*, which is called a guide, *the* is dispensed with somewhere between *o'* and E, but it is not known where it is omitted and where the plain portion (as shown in Fig. 6) commences.

Applicant should furnish an enlarged plan view of the device between the letters *o'* and E of Fig. 2, so that the particular construction of — at that point may be known. When this is properly done the application will be considered upon its merits, but at present the construction is not understood.

WM. H. BLODGETT, *Examiner.*

W. I. C.

In Re E. T. POLLARD. Cigarette mach's. 106,413. Sept. 14, 1883.

Hon. Comm'r of Patents.

SIR: An additional drawing, as requested, is furnished herewith. Please amend by inserting after the description of the drawings—

A. "Figure 7 is an enlarged perspective view of a portion illustrating the relation of the guides."

It is requested that this case may have expeditious action on its merits, now that suggestions of the office have been met.

Resp't'y, E. T. POLLARD,
By his att'y, J. R. NOTTINGHAM.

2, 13, '84.
96.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Feb'y* 12, 1884.

E. T. Pollard, care J. R. Nottingham, 515 7th St., city.

Subject: Cigarette machine. Filed Sept. 14, '83. No. 106,413.

The description and claim are confused by referring to this device as composed of several tubes instead of one. It should be definitely stated just what part of this continuous tube the letters C, D, and E represent.

Page 2 of the specifications, line 26, tube should be substituted for "sleeves." On page 3, line 13 and 19, rollers *g g* are described as an apron, *b*, but only one roller is seen, and that carries an apron, *g'*. Same page, last line, the following should be omitted:

"Being the entrance of the closing tube."

59 Claim 1 is met in patent Nos. 260,959, to C. G. & W. H. Emery, July 11, 1882, and 238,640, to J. R. Bonsack, Mar. 8, 1881 (cigar machine).

Claim 3 is met in No. 2599, to G. A. Reiniger, Oct. 29, 1861 (cigar machine).

Claim 4 is met in patent to Reiniger, here cited, and 225,174, to L. W. Spencer, Mar. 2, 1880 (plug making).

Claims 1, 3, and 4 are rejected.

WM. H. BLODGETT, *Examiner.*

W. I. C.

In Re E. T. POLLARD. Cigarette machine. Filed Sept. 14, 1883. S. No. 106,413.

Hon. Comm'r of Patents.

SIR: Please amend as follows:

After line —, page 6, please insert as follows:

B. "These parts, C, D, and E, comprise the tube into which the tobacco and wrapper are fed and in which the cigarette is formed and finished."

Last line, page 3, cancel "being the entrance to the closing tube."
Line 5, page 4, erase "tube" and insert "portion."
Line 6, page 4, erase "lip."
Line 7, page 4, erase "lip" and insert "guide."
Line 9, page 4, after "closing," insert "portion of the tube."
Erase claim and substitute:

---

1. [The tapering compressing]* tube (In a cig. mach. a) having the guide (as) d' extending spirally from its entrance to its discharging end, said tube having an opposite spiral and converging guide, d, which terminates at a point where the outwardly projecting abutment and guide, d^2, on one side of a slit or opening in the tube commences, substantially — described.

Erase and insert amendment F, filed April 30, 1884.

C.

2. The tapering compressing tube (formed) consisting of the parts C D E, the part D being provided with the (a) spiral guide d' through its entire length, and having also a spiral guide d, terminating in (a) an abutment guide, d^2, (and) the whole adapted to operate as and for the purpose set forth.

Erase and insert amendment D, filed March 28, 1889.

3. The compressing tube composed of the trough C, tapering portion D, and cylindrical portion E, (a) the tapering portion D having two (a) tapering guides for the wrapper, one guide terminating in an abutment guide, as d^2, and the other extending (up) to the (line of) (said) guide d^2, as set forth.

C.

4. In combination with guide A and trough portion C of the tube, a feeding device, consisting of endless belts, (as) g' b, arranged to form sides and bottom of a trough or channel, and rollers arranged to move said belts in the same direction simultaneously, the whole arranged and operated as set forth.

Old.

Respectfully,

E. T. POLLARD,
By J. R. NOTTINGHAM, *Att'y.*

60 *In Re* E. T. POLLARD. Cigarette machine. 106,413. Sept. 14, '83.

Hon. Comm'r of Patents.

SIR: Upon further consideration it is decided to amend by cancelling claim- 2, 3, and 4 and substituting:

---

* Words enclosed in brackets erased in copy.
Words and sentences enclosed between rules erased in copy.

Erase per amendment filed Ap'l 30, 1884.

"2. The tapering compressing tube consisting of the parts C D E, the part D being provided with a spiral guide d' through its entire length, and having also spiral guide d, terminating in an abutment guide, d^2, the whole adapted to operate as and for the purpose specified.

D. 3. The compressing tube consisting of the trough C, tapering portion D, and cylindrical portion E, the tapering portion D having two [tapering]* converging A guides for the wrapper, one guide terminating in an abutment guide, as d^2, and the other in front of said abutment A a longitudinal slit formed along the line of extending A up to A said guide d^2, as set forth."

Respectfully,

EDWARD T. POLLARD,
By his att'y J. R. NOTTINGHAM, *Att'y.*

96.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Ap'l 21st*, 1884.

E. T. Pollard, care J. R. Nottingham, 515 7th St., present.

Subject: Cigarette machine. Filed Sept. 14, 1883. No. 106,413.

Claim 1 is objected to, as it sets forth that the guide d' extends from the entrance to the discharge end of the tube. This is incorrect. There is but one tube, as set forth in a former office letter.

The claims are all objected to, as they each fail to include sufficient mechanism to constitute an operative device. The slot is important, as well as the abutment, and yet they are not directly included in the claims; only indirectly. The claims should be carefully drawn to the device and set forth construction specifically, and it should be brought out that one guide is longer than the other; that the long guide extends in front of the abutment d^2, and that the guides converge.

WM. H. BLODGETT, *Examiner.*

W. I. COLLAMER, *Ass't Ex'r.*

In Re E. T. POLLARD. Cigarette Machine. 106,413. Sept. 14, '83.

Hon. Comm'r of Patents.

SIR: Please amend as follows:

After line 3, page 3, insert:

E. 61 Between the points o and o'—that is to say, along in front of the abutment guide—is arranged a longitudinal opening, o^2, and the wall of the guide d' passes

* Words enclosed in brackets erased in copy.
Words and sentences enclosed between rules erased in copy.

below the plane of the guide *d* at this point to allow one edge to pass under or below the other edge of the wrapper.

Cancel the claims and insert:

1. In a cigarette machine, a tube having two converging guides, one for each edge of the paper wrapper, one guide terminating in an abutment to hold one edge of the paper extended and the other passing in front of and up to a slit or opening formed along the line of said abutment to force the opposite edge of the wrapper under, so that the first edge will overlap the same, as set forth.

F. 2. The compressing tube described, consisting of the trough C, the tapering portion D, and cylindrical portion E, and the tapering portion having two converging guides for the wrapper, one guide terminating in an abutment, as d^2, and the other up to a longitudinal slit or opening, o^2, formed along the line of said abutment, all combined and operating as and for the purposes set forth.

Resp't'y, E. T. POLLARD,
By his att'y, J. R. NOTTINGHAM.

MEMO.—Much pains has been taken to avoid all further objection and to meet the objections raised. The claims presented are fully warranted by the invention set forth, and should be allowed.

A liberal action is requested.

Resp't'y, J. R. NOTTINGHAM,
Att'y for Pollard.

96. DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *June* 13, 1884.

E. T. Pollard, care J. R. Nottingham, 515 7th St., city.

Subject: Cigarette machines. No. 106,413. Filed Sept. 14, 1883.

In order to give sufficient time for amendment in another case, with which this application probably interferes, further action is delayed in this case for eight days from date hereof.

WM. H. BLODGETT, *Examiner.*

W. I. COLLIMER, *Ass't Ex'r.*

62 Serial No. 106,413.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *July* 1*st*, 1884.

Edward T. Pollard, care J. R. Nottingham, city.

SIR: Your application for a patent for an improvement in cigarette machines, filed Sept. 14th, 1883, has been examined and allowed.

The final fee, twenty dollars, must be paid, and the letters patent bear date as of a day not later than six months from the time of this present notice of allowance.

If the final fee is not paid within that period the patent will be withheld, and your only relief will be by a renewal of the application, with additional fees, under the provision of section 4897, Revised Statutes. The office aims to deliver patents upon the day of their date and on which their term begins to run, but to do this properly will be expected to pay their final fees at least twenty days prior to the conclusion of the six months allowed them by law. The printing, photographing, and engrossing of the several patent parts, preparatory to final sealing and signing, will consume the intervening time, and such work will not be done until after the payment of the necessary fees.

When you send the final fee you will also send, distinctly and plainly written, the name of the inventor, title of invention as above given, date of allowance (which is the date of this circular), date of filing, and, if assigned, the names of the assignees.

If you desire to have the patent to assignees, an assignment, containing a request to that effect, together with the fee for recording the same, must be filed in this office on or before the date of the payment of final fee.

Additional copies for drawings and specifications will be charged for at the following rates: Single copies, uncertified, 25 cents; twenty copies or more, 10 cents each. The money should accompany the order.

Very respectfully, BENJ. BUTTERWORTH,
Commissioner of Patents.

(Marginal note:) The within title is that given by the examiner in charge as most appropriate to your invention. Should you desire a change in the same, satisfactory reasons must be given therefor on or before the payment of the final fee.

☞In remitting the final fee give the serial number at the head of the notice.

Memorandum of Fee Paid at U. S. Patent Office.

Serial No. 106,413. 1883.

Inventor, Edward T. Pollard.
Patent to be issued to Edward T. Pollard.
Name of invention as allowed, cigarette machine.
Date of payment, July 3rd, 1884.
Fee, final, $20.00.
Solicitor, J. R. Nottingham.
Date of filing, Sept. 14, 1883.
Date of circular of allowance, July 1, 1884.
Send patent to J. R. Nottingham, city.

63

Serial No. 106,413.
1883. Ex'r Book No. $\frac{53}{149}$.
Patent No. 302,521.

Edward T. Pollard,
Of Lynchburg,
County of Campbell,
State of Virginia.
Invention, cigarette machine.

Parts of application filed.
- Petition, Sept. 14, 1883.
- Affidavit, " " "
- Specification, " " "
- Drawing, " " "
- Model not required.
- Specimen, ——.
- First cash fee, $15, Sept. 14, 1883.
- " " cert., ——.

App. filed complete, Sept. 14, '83.
Examined June 30, '84. W. H. Blodgett.
Countersigned July 1, '84. J. W. Babson, for Commissioner.
Notice of allowance, July 1, 1884.
Final fee cash, $20, July 3, 1884.
" " cert., ——, 188–.
Patented July 22, 1884.
Att'y or P. O. address, J. R. Nottingham, 515 7th St., present.

1883.

Contents.

Application papers.
1. Jan. 23, 1884, letter.
2. Feb. 8, 1884, amendment A.
3. Feb. 12, 1884, rej.
4. March 7, 1884, amendment B C.
5. March 28, 1884, amendment D.
6. Apr. 21, 1884, rejection.
7. April 30, 1884, amendment E F.
8. June 13, 1884, letter.
9. June 30, 1884, issue.
10.
11.
12.
13.
14.
15.
16.
17.
18.
19.
20.

Title: improvement in cigarette machines.
131, tobacco cigar machines, continuous filler.
J. F. F., M. H.

66 UNITED STATES PATENT OFFICE.

EDWARD T. POLLARD, of Lynchburg, Virginia.

Cigarette-Machine.

Specification forming part of Letters Patent No. 302,521, dated July 22, 1884. Application filed September 14, 1883. (No model.)

To all whom it may concern:

Be it known that I, Edward T. Pollard, a citizen of the United States, residing at Lynchburg, in the county of Campbell and State of Virginia, have invented certain new and useful improvements in cigarette-machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in the means for guiding the tobacco to the filler-forming devices, and to improvement in the means for guiding the wrapper around the filler and into the closing-up and finishing tube. The wrapper-strip has heretofore been guided to the closing-up and finishing or shaping tube through a tapering trough and conical guide or compressing tube having at its small end, which is connected to the closing-up tube, a longitudinal slit, on one side of which the tube-wall extends outward as a guide and abutment for one margin of the paper strip while receiving paste, while the wall on the other side of the slit curves toward the outwardly extending wall or lip, so as to guide the opposite edge of the paper directly to the projecting pasted margin. In such an arrangement the unpasted margin is left free and unsupported in order that it may come under the pasted margin, and for lack of support it becomes crumpled or wrinkled to such an extent that the cigarette lacks neatness of finish, and, further, the unsupported unpasted margin is liable to be bent back and torn if the wrapper travels at high speed, so that rapidity of manufacture is impossible.

The object of my invention is to overcome the disadvantages of the old form of device referred to; and to this end it consists in certain novel constructions and combinations of parts, which will be fully understood from the following particular description in connection with the accompanying drawings, in which—

(Here follow diagrams marked pp. 64 & 65.)

Figure 1 is a side elevation and partial section of the cigarette-forming and tobacco-feeding devices. Fig. 2 is a plan view of the same. Fig. 3 is a perspective view of the same. Fig. 4 is a cross-section on line *x x* of Fig. 3. Fig. 5 is a similar section on line *y y*.

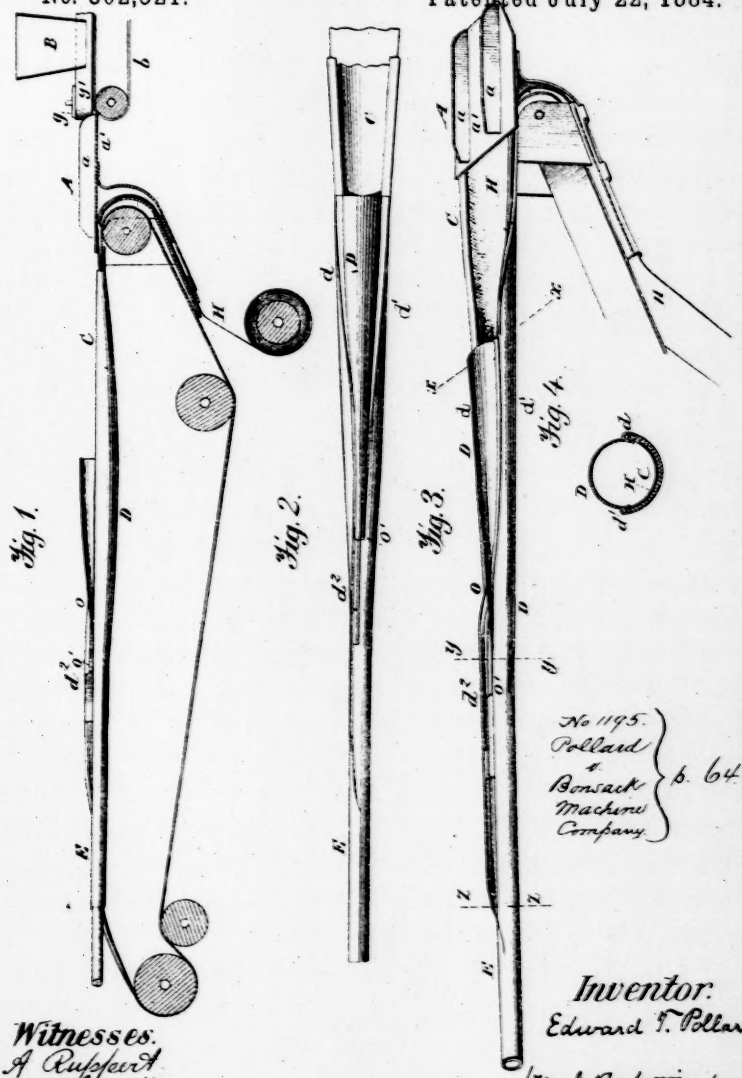
(No Model.)

2 Sheets—Sheet 1.

E. T. POLLARD.

CIGARETTE MACHINE.

No. 302,521. Patented July 22, 1884.



No 1195. Pollard & Bonsack Machine Company. b. 64

Witnesses.
A Ruppert
E T Gaddis

Inventor.
Edward T. Pollard
by J. R. Nottingham
atty.

(No Model.) 2 Sheets—Sheet 2.

E. T. POLLARD.

CIGARETTE MACHINE.

No. 302,521. Patented July 22, 1884.

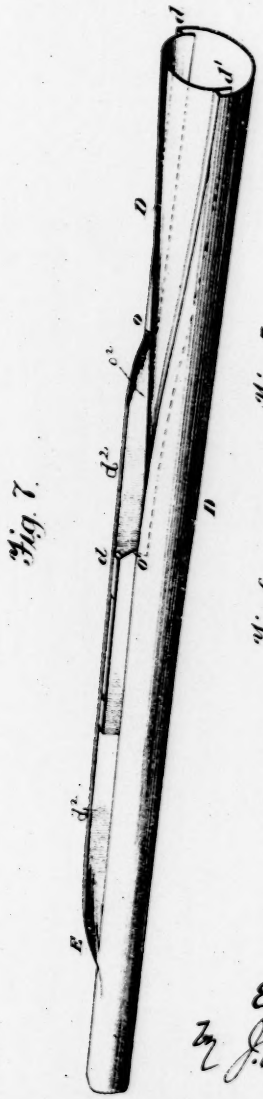


Fig. 7.



Fig. 5.



Fig. 6.

No 1195.
Pollard
vs.
Bonsack
Machine
Company
} p. 65

Witnesses.
A. Ruppert.
E. T. Gaddis,

Inventor.
E. T. Pollard
by J. R. Nottingham
Atty.

Fig. 6 is a similar section on line z z. Fig. 7 is an enlarged perspective view of a portion illustrating the relation of the guides.

The letter A indicates the guide for conveying the loose tobacco from the feed-hopper B to the tapering trough C, from which it passes to the conical or tapering compressing-tube D, and thence into the wrapper-closing tube E. These parts C, D, and E comprise the tube into which the tobacco and wrapper are fed, and in which the cigarette is formed or finished.

The conveyor or guide A consists of two side walls, *a a*, resting on a bottom plate, *a'*, which projects outwardly both ways from the side walls, and terminates at one end directly over the wide end of the trough C, and has its other end in contact with the feed-belt *b*, which carries the tobacco from the hopper in the usual manner. At each side of the entrance of the guide A is a vertical roller, *g*, and these rollers carry belts *g'*, which drive the tobacco through the guide to its discharge end, where it falls into the trough C and upon the paper strip H, which is carried longitudinally in said trough in the usual manner. The end of the bottom plate *a'*, being in contact with the feed-belt *b*, serves to keep the same clean by scraping the tobacco therefrom, and the belts carried by the rollers, as *g*, move the tobacco along in practically uniform volume, whereas in previously-constructed machines of this class it was driven solely by the feed-belt.

The peculiarity of construction of my compressing-tube is that from its entrance or larger end of the portion D are arranged guides *d d*, one of which, *d*, extends to the point *o*, where the wall of the tube is bent outward, as shown, to form a guide and abutment, d^2, for one margin of the paper strip, while the other guide, *d'*, continues to the point *o'*, thus forming a guide which is closed around the edge of the paper strip, so as to support and guide the unpasted margin to almost the very point where the pasted margin is closed upon it. Between the points *o* and *o'*—that is to say, along in front of the abutment-guide—is arranged a longitudinal opening, o^2, and the wall of the guide *d'* passes below the plane of the guide *d* at this point, to allow one edge to pass under or below the other edge of the wrapper. The abutment and guide d^2 is bent down at the entrance of the closing portion E, so as to fold over the edge of the wall upon which is formed the guide *d'*, and as the unpasted margin of the paper passes from the guideway formed by the guide *d'* and into the closing-tube, the pasted margin is guided down upon it, and the two are pressed together by the closing portion of the tube. The paper strip is carried along on the tube by a belt, as is usual in this class of machines, and is pasted by the ordinary means, and as my invention has no relation to improvement of the mechanism for the purposes, a detailed description of the same is deemed unnecessary. I may state, however, that such mechanism is illustrated and described in the patent of J. A. Bonsack, granted March 8, 1881, No. 238,640.

What I claim is—

1. In a cigarette-machine, a tube having two converging guides—one for each edge of the paper wrapper—one guide terminating in

an abutment to hold one edge of the paper extended, and the other passing in front of and up to a slit or opening formed along the line of said abutment to force the opposite edge of the wrapper under, so that the first edge will overlap the same, as set forth.

2. The compressing-tube described, consisting of the trough C, the tapering portion D, and cylindrical portion E, the tapering portion having two converging guides for the wrapper, one guide terminating in an abutment, as d^2, and the other extending up to a longitudinal slit or opening, o^2, formed along the line of said abutment, all combined and operating as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD T. POLLARD.

Witnesses:
GEO. L. BIDGOOD.
JOSEPH A. JOHNSTON.

67 *Deposition of Rob't W. Thurman.*

Depositions for the plaintiff.

Depositions taken before me, A. R. Long, a notary public in and for the city of Lynchburg, at the law office of Kean & Kean, in said city, between the hours of 9 a. m. and 6 p. m. on the 15th day of July, 1887, by consent of parties, to be read as evidence in behalf of plaintiff in a certain suit in equity now pending in the circuit court of the United States for the western district of Virginia, sitting at Lynchburg, in which Edward T. Pollard is plaintiff and the Bonsack Machine Company is defendant.

Present: Kean and Kean, counsel for plaintiff; D. B. Strouse, counsel for defendant.

Witness ROBERT W. THURMAN, being duly sworn on behalf of the plaintiff, deposes as follows:

1st question by plaintiff's counsel. Please state your name, age, residence, and occupation.

Ans. Name, Robert W. Thurman; age, 41; residence, 625 Main street, Lynchburg, Virginia; occupation, a machinist by trade, but at present I am carrying on the business *and* stencil cutting and general repairing.

2nd question by same. Are you acquainted with E. T. Pollard, the plaintiff, and with D. B. Strouse, Esqr., president of the defendant's company? If you are, how long have you known each of them?

Ans. I know both of them. I have never been intimately acquainted with Mr. Pollard, but I have known him for about seven or eight years. I have *have* known Mr. Strouse only since I have been doing work for the Bonsack Machine Company—since 1882 or 1883 or about that; I don't remember exactly.

3rd by same. Did you know anything about the employment of the plaintiff, E. T. Pollard, by or on behalf of the Bonsack Machine

Company when he was first employed by them? If so, state whether you had any agency in or connection with his being so employed, and state how it came about, by whom he was employed, and what he was to do, when he was to do it, and generally tell all about it and what was done in pursuance of any arrangement so made, so far as your personal knowledge goes.

Ans. Yes, sir. I don't know as I know as to dates exactly. Mr. Strouse wanted to employ me to work for the Bonsack Machine Company, and, not being able to leave my own business to do so, asked me if I knew of any one I could recommend, and I am not not certain that at the time I mentioned Mr. Pollard, but afterwards I mentioned Mr. Pollard as a good man who would suit him. Mr. Strouse asked me as to his character. I knew nothing about it, and referred him to Mr. James Mahone, whom Mr. Pollard had been working for in the James River Agricultural Impliment factory. I don't know that it was the next day, but a short time after that—a day or so—Mr. Strouse called in and asked if he could see Mr. Pollard. I sent over across the street to his room, just opposite our shop, for him. Mr. Pollard came over as soon as he received the message, and I introduced him to Mr. Strouse. Mr. Strouse asked him some questions as to whether he thought he could run the machine and about working for the Bonsack Machine Company, and made an agreement with him to go to work for the company in Richmond, I think. Mr. Pollard only agreed to go in case I would go to Richmond with him and show him what I knew about the machine, he never having worked the machine. We then agreed—Mr. Pollard, Mr. Strouse, and myself—to meet in Richmond on a certain day; I don't remember the date. We met in Richmond at the appointed time, and I went to Allen & Ginter's factory direct from the train, and Mr. Strouse and Mr. Pollard met me at the factory. I gave Mr. Pollard all the instructions I could
68 in regard to running the machine while I was there. I stayed there two or three days—I don't remember how long—and came on home and left Mr. Pollard running the machine. I left Mr. Pollard and Mr. Strouse both in Richmond.

4th by same. What was it Mr. Strouse wanted to employ you to do for the Bonsack Company?

Ans. I think he wanted me to run the machines and see that they were in running order—run the machines and put them up and keep them in order; that is my recollection. At that time, I think, he wanted me to go to Richmond to run the machines and keep them in order at Allen & Ginter's. There was only one machine there at that time. Failing to get me, then Mr. Strouse and Mr. Krise asked me to recommend some good man.

5th by same. Who had charge of the machine at Allen & Ginter's up to the time you, Pollard, and Mr. Strouse went there as above stated?

Ans. A young man by the name of Foutz, I believe.

6th by same. At the time Pollard was so engaged for the defendant company were the terms discussed on which he should serve the

company? If so, and any agreement was reached, state what the terms were as to his duties and his compensation.

Ans. Mr. Pollard was to go to Richmond and run the machine. My recollection is that he was employed to run the machine at Allen & Ginter's. I don't remember that anything was said about his taking charge of any other machines. I think at that time he was employed to work for the Bonsack Machine Company and at that time to go to Richmond and work the machine at Allen & Ginter's factory. Mr. Strous agreed, I think, to pay him $75 a month—I won't be certain that that's the amount exactly—if he suited the company, and promised to increase his pay if his work proved satisfactory to the company.

7th by same. In that conference was anything said about improvements contemplated or to be made by Pollard in the machine or in any part of it?

Ans. I don't remember anything being said about making improvements on the machine. I think the main thing discussed was w-ether he was able to run the machine and his giving satisfaction. Mr. Pollard had no doubt his being able to run the machine, only he wanted me to go along to give him the advantage of any little experience I had had with them. The matter was settled in a short time. There was very little talk about it. Mr. Strouse asked Mr. Pollard some questions as to what he thought he could do about running the Bonsack machines and then they came to an agreement.

8th by same. Were the terms you have mentioned modified in any respect after you, Mr. Pollard, and Mr. Strouse reached Richmond?

Ans. No, sir; I never heard the terms discussed any more after that, though I don't know anything about it.

9th by same. What was the difficulty about the machine at Allen & Ginter's at that time which caused Mr. Strouse to wish to employ you and, failing in that, to employ Pollard to run it?

Ans. Well, I don't know that there was any trouble with the machine at that time. The young man that was running it didn't seem to understand the machine and could not get along well enough to give satisfaction. Before that time, when I was in Richmond before on several occasions, Mr. Pope, of the firm of Allen & Ginter, had made complaint with regard to the shape of the cigarette and its being filled too tight, but at that time Mr. Pollard was employed and we went to Richmond I don't know that there was any complaint of the machine. I never heard of any. If I did I don't remember it. Mr. Krise employed me several times to go down to Richmond before that to see what was wrong with the machine, Mr. Foutz's work not giving satisfaction. It was during my visit to Richmond that I heard complaint in regard to the cigar-
69 ettes; that was before Mr. Pollard, Mr. Strouse, and I went down.

10th by same. What was the character of the arrangement upon the machine at Allen & Ginter's when Pollard took charge of it for conveying the tobacco into the wrapper, compressing the tobacco into

shape, and folding the paper around it? Discribe this portion of the apparatus as it was then fully and with precision. The drawings from the Patent Office are here, filed with the papers in the case, to which you can refer in giving the description called for, if you wish to do so.

Ans. The tobacco conveyed itself by force from under the press-wheel into the tube. The tube at that time rested against the under steel belt, and there were guides on the sides of the tube that prevented the filler from running off the sides. The tobacco was conveyed to the tube by three steel belts, one broad belt at the bottom running flat down and two narrow belts running at right angles. The tobacco was compressed into shape by a compressing wheel on the machine. It was then conveyed into the tube and the paper was folded around it and sealed. It then passed onto the cutter on the machine, where it was cut into proper lengths.

11th by same. Look at figure 3, sheet 3, with J. A. Bonsack's patent No. 247,795, filed as Exhibit C with E. T. Pollard's deposition in the case, and say whether or not that shows the steel belts and presser wheel arranged as referred to in your last answer.

Ans. Yes, sir; it does.

12th by same. Look again at the same figure and indicate by description, by the use of the letters on the figure, what change was made in the arrangement of the belts and wheels after Pollard's tube came into use.

Ans. I don't know whether this change — before or after Pollard's tube came into use, but there was a change made in the arms and supports of the presser wheel. They were made longer in order to throw the compressing wheel forward. This was the only change in the belts or wheels that I know of. Probably the shape of the presser wheel was altered a little. I don't remember whether it was or not.

15th by same. You say in answer to 9th Qu. above: "I don't know that there was any trouble with the machine." Please state whether the *had machine* up to the time of your going to Richmond to meet Pollard and Strouse ever turned out a merchantable article of cigarrettes.

Ans. That is a question that I don't know that I can answer as to its being a merchantable article of cigarrettes, knowing very little of what is required by the public. Mr. Pope complained to me very much about the shape of the cigarrettes and about its being filled too tight. He complained of having it shipped back to him. I know very little about what is needed in making cigarrettes more than that they should be smooth and evenly filled.

14th by same. What do you mean by saying that the cigarrettes as made before Pollard went to Richmond were "filled too tight"? Do you mean to say that the tobacco constituting the "filler" was packed into the paper too tight, so as to burst it, or that the paper was wrapped too closely upon the tobacco or merely that the tobacco was too closely compressed together without reference to the paper wrapping?

Ans. Sometimes it would be tight enough to burst the paper;

sometimes it would be too tight to smoke free, but not tight enough to split the paper, but to open it where pasted. It was too tight for the paste to take hold and hold it in place.

15th by same. Please explain how the tobacco was put into the paper wrapper at the time under discussion, when Pollard first went to Richmond. Look at the figures in the exhibit filed with Pollard's deposition and describe the course of the tobacco from the time it got between the steel belts in figure 3, Exhibit C with Pollard's deposition, till the finished cigarrette roll emerged. Describe particularly the formation of the filler, its introduction into the tube, and the wrapping the paper around it, and how these processes were accomplished, and state what was the shape of the cigarrette when made.

Ans. The tobacco was conveyed forward by the steel belts under the presser wheel H, figure 3, Exhibit C, and there pressed into shape and carried forward into the tube by a cloth belt, and in this linen belt running through the tube where the paper was folded around the filler and pasted and sealed. It made a cigarette with three flat sides and round on top. I have drawn myself the shape of a section of the cigarette.

16th by same. Please state whether the filler was so compacted between the belts and presser wheel as to retain the above shape permanently.

Ans. No, sir; it wasn't so compact that it would retain the shape it was pressed in if left out loose, because in prising tobacco after it comes from under a pressure there is a reaction and the tobacco swells out again unless it is held in that position long enough to set; but in coming from under the presser wheel and being held in place by the paper being sealed around the filler the paper would hold it in that position as it came from under the presser wheel, provided the filler wasn't too large for the size of the cigarette that the machine might be making.

17th by same. Why was the shape you have described objectionable?

Ans. I can only answer that from what Mr. Pope told me. They were unhandy to pack and made an ugly package was the way Mr. Pope expressed it to me.

18th by same. Did the same character of objections continue after Pollard took charge of the machine and before he commenced to use his own tube?

Ans. I don't know, sir. I was never in Richmond afterwards on business for the company, and don't know anything as to objections after that time except from heresay.

19th by same. Please state as clearly and concisely as you can the difference in principle in the tube invented and patented by E. T. Pollard and described in letters patent No. 302,521, filed with Pollard's deposition as Exhibit D, and shown in the tube filed with the same deposition as Exhibit E and the mode of moulding the filler and wrapping the paper around it as in use when Pollard first went to Richmond. Refer, if you choose, to any of the exhibits filed.

Ans. Figure 5, Exhibit B, shows a portion of the tube as I first

made and used—that is, the gro-ved and double gro-ved guide with a spiral gro-ve on tapering section. That's *is* about the style of tube that I first used and that was in use when Pollard first went to Richmond. With that tube the filler was formed under the presser wheel H, figure 3, Exhibit C with Pollard's deposition, and the paper was folded around the filler, pasted and sealed in the tube. Mr. Pollard has changed the shape of the above-described tube, but putting in a compressing tongue and using two open gro-ves instead of one spirial tube as in the old tub-, which presses and shapes the filler round, whereas in the old tube the filler was shaped under the presser wheel. The paper is put around in pretty much the same way, except that it is left free by the open gro-ves instead of being confined. The tube has been altered considerably in other respects, but that part which I have explained is about the substance of what Mr. Pollard explained to me as to how to make his tube.

20th by same. The former tube is described as having one or two spiral-guide gro-ves and Pollard's as having two converging straight-guide gro-ves. The word straight is not used by you, but appears in Pollard's letters patent. Please state whether or not that is not an *as*cential difference in principle.

Ans. There is but one spiral gro-ve in the old tube. There is a very great difference in the tubes from the fact that Pollard's tube has two open gro-ves which leaves the edges of the paper free
71 untill filler is compressed into a round shape, after passing which it — pasted and sealed.

21st by same. Please state whether or not the forming and moulding the filler at the same time and continuously with wrapping the paper around is not an essential difference in principle in Pollard's tube from the moulding the filler by the pressure wheel, afterwards by a different operation, wrapping the paper around it, as you say was done before Pollard made his tube.

Ans. Yes, sir; it is a very essential difference, because the filler was formed square on the sides and round on top by the presser wheel before it entered the old tube and was held in that shape by being confined by a paper wrapper; whereas Pollard's tube presses the filler round.

22nd by same. You have spoken of Pollard's being employed to run one Bonsack machine, Allen & Ginter's, in Richmond; please state whether at that time any other of these machines — in operation; and, if so, where.

Ans. There was none in operation to my certain knowledge in the United States. I don't know of any other in the United States at that time.

23rd by same. You say you were employed to make tubes for the Bonsack Company. Had you been employed in that way for some time before Pollard was introduced to Mr. Strouse by you? If so, how many tubes had you then made?

Ans. Yes, sir; I had been employed by the Bonsack Company before that time to make tubes, but I can't say exactly how many I had made.

24th by same. Have you made tubes for the Bonsack Machine Company since Pollard invented his tube; if so, how many have you made since that time?

Ans. Yes, sir; I have made tubes since then. I suppose I have made somewhere in the neighborhood of fifteen or twenty dozen; I couldn't say exactly.

25th by same. Please state whether these made by you since Pollard's invention were made on the patent and principle of Pollard's *of Pollard's* tube or not.

Ans. Yes, sir; they were made by a patent furnished by Pollard himself. Pollard came up here just before he went to Europe and showed me how to make his tube. I didn't know how to make it. He made one in the shop to show me how to do it—that is, he helped me to make it; he and I made it together.

26th by same. Please state what, if anything, passed between you and Pollard when he showed you how to make these tubes, especially as to the leave to make them and to show others how to make them.

(This question excepted to by counsel for defendant on the grounds that conversations or occurrencies between the plaintiff and witness are not proper evidence in this cause on behalf of complainant.)

Ans. I don't remember exactly what passes. He congratulated himself, I know, on having made a big improvement in the tube. He also gave me authority to make the tube for the Bonsack Machine Company and made me promise not to show any one else how to make it then, or requested me not to show any one else.

27th by same. Can you say when it was Pollard went to Richmond? Give the date as accurately as you can.

Ans. I can't say. I don't remember what date it was; in fact I don't remember what year it was.

28th by same. Do you now make tubes for the Bonsack Company?

Answer. No, sir.

29th by same. When and why did you stop?

(Objected to as irrel*a*vent.)

Ans. I suppose three or four months ago I stopped, I don't remember exactly how long; or rather they were taken away from me about that time. I never stopped making them of my own accord.

72 Cross-examined by defendant's counsel:

1st X question by counsel for defendant. By "Pollard's tube," as it is called in these depositions, do you not mean the tube now before you having two straight open gro-ves and the same filed by E. T. Pollard with his deposition?

Ans. This is the tube that I have been making as "Pollard's tube." It is the tube produced before me as the one filed with Pollard's deposition.

2nd by same. In your answer to question No. 19 by complainant's counsel did you not have the tube just above referred to before you, and did you not base your answer upon that tube when referring to the Pollard tube?

Ans. I had that tube before me and had reference to that make of tube when referring to the Pollard tube. That "exhibit tube" embraces all the principles referred to in the Pollard tube.

3rd by same. Do you know of any form of tube for cigarrette machines invented or made by E. T. Pollard?

Ans. No, sir.

4th by same. In your examination-in-chief you spoke of a complaint that the machine-made cigarrettes were too tight and did not smoke freely. Is not the quantity of tobacco in the cigarrettes determined by the number of ounces of tobacco put on the feed-belt?

Ans. It is.

5th by same. Did you not speak to Mr. Krise about the employment of Pollard by the Bonsack Machine Company before you mentioned him to D. B. Strouse?

Ans. I may have done it, but I don't remember exactly about that. I was under the impression, though, that I mentioned Mr. Pollard to Mr. Strouse first.

6th by same. Was not the conversation between Strouse and Pollard in your shop very short, and was there anything particularly discussed except the salary which Mr. Pollard wanted?

Ans. Yes, sir; it was very short. I don't suppose it occupied more than fifteen or twenty minutes—not over half an hour. They soon came to an agre-ment. There was nothing particularly discussed besides the salary except as to whether Mr. Pollard thought he could run the machine and give satisfaction.

7th by same. Before sending for Pollard, did you not tell D. B. Strouse that you had talked with Pollard, and that he could be gotten by the Bonsack Company?

Ans. I think I did.

8th by same. Did not Pollard request you to do him the kindness to get him a job with the Bonsack Company?

Ans. No, sir; I don't remember that he ever requested me. I first mentioned the matter to him and asked him how he would like to accept a place with the Bonsack Company. I told him I thought it likely he could get a job.

9th by same. Did you not tell Mess. Krise and Strouse that you regarded Pollard as a fine mechanic and something of a genius, or words to that effect, and that you thought he would be of much service to the Bonsack Machine Company?

Ans. No, sir; my recollection of telling Mr. Strouse is that I was not intimately acquainted with Mr. Pollard, but had always heard that he was a fine mechanic and a very ingeni-us man, and referred Mr. Strouse to Mr. James Mahone whom Pollard had been working for, and could tell him all about it.

10th by same. Did you not run the Bonsack machine in Cuba

and Richmond to the satisfaction of the manufacturers before Pollard's employment?

Ans. Yes, sir; I have answered before that Mr. Pope had made complaint of the shape of the cigarrette; as to filling the cigarrette, it was perfectly satisfactory—that is, I was lead to believe so.

73 Re-examination by plaintiff's counsel:

1st question by plaintiff's counsel. In his last (10th) question Mr. Strouse asks, "Did you not run the Bonsack machine in Cuba and Richmond to the satisfaction of the manufacturers"? As I understood your verbal answer you said, "Yes, sir; to the satisfaction of the parties," and then as your answer is recorded. What I wish to direct your attention especially to is the question of satisfaction "to the manufacturers." Were you running the machine in Cuba and Richmond as a business or as an experimental exhibition of it to cigarrette-makers, with a view of introducing it, and was the product of such work as you did in Cuba put on the market so as to test its acceptibility with the trade before Mr. Pollard's employment?

Ans. In Cuba, I think, it was an experiment business I was on. I went down there to put the machine up in Mr. Sanderson's factory, in Havana, so that he could see it run. I was in Cuba about two weeks, but only run the machine after I put it up about two days. I was never employed by the Bonsack Company to run the machine regularly in Richmond or anywhere else. I only made a 100,000 or such a matter in Cuba and Mr. Sanderson said he wanted them for samples. I know nothing about the cigarrettes I made in Richmond except from what Mr. Pope told me. He said he had shipped cigarrettes and had a good many of them shipped back to him as being filled too tight. That was the complaint Mr. Pope made to me about the cigarrettes that Mr. Foutz made. Mr. Pope expressed himself as satisfied with the work that I made while I was there. I was never there more than two or three days at a time.

And further this deponent saith not

ROBERT W. THURMAN.

WESTERN DISTRICT OF VIRGINIA, *City of Lynchburg*, } *To wit:*

I, A. R. Long, a notary public in and for the city of Lynchburg, in the State of Virginia, do hereby certify that I was attended at the time and place mentioned in the foregoing depositions by Kean & Kean, solicitors; by E. T. Pollard, complainant, and D. B. Strouse, solicitor for The Bonsack Machine Company, respondent in the said cause, and by Robert W. Thurman, witness, who is—sound mind and lawful age and who was duly cautioned and sworn by me and examined, and his deposition, having been reduced to writing by me, was signed by said witness in my presence; and I further certify that I am not of counsel or in any way interested in the event of said cause.

Witness my hand and seal, at the city of Lynchburg, in said district, this 15th day of July, 1887.

[Seal A. R. Long, Notary Public, Lynchburg, Va.]

A. R. LONG,
Notary Public.

Notary's fee charged to plaintiff, $5.00.

74 *Deposition of Anthony Ruppert for Defendant Filed.*

The deposition of Anthony Ruppert taken before me, Phillip Mauro, a notary public in and for the District of Columbia, at my office, No. 635 F street, Washington, D. C., this 17th day of August, 1887, to be read as evidence in behalf of the Bonsack Machine Co., in suit now pending in the circuit court of the United States for the western district of Virginia, wherein E. T. Pollard is plaintiff and the said Bonsack Machine Co. is defendant, said depositions being taken at the time and place aforesaid by consent of parties.

Present: John Dunlop, Esqr., for complainant; D. B. Strouse, Esqr., for defendant.

ANTHONY RUPPERT, being first duly sworn, deposes and says, in answer to interrogatories propounded by D. B. STROUSE, Esqr., as follows:

1. What is your name, age, residence, and occupation?

A. Anthony Ruppert; thirty-eight years of age; occupation, draftsman on Patent Office work; residence, 418 New York avenue, Washington, D. C.

2. How long have you been a draftsman on Patent Office work?

A. I may say eighteen years.

3. Examine copy of specifications and drawings of patent issued to E. T. Pollard, dated July 22nd, 1884, No. 302,521, and state if you know who made the drawings for said patent.

A. I made these drawings.

Q. 4. Examine drawings figure 7, and state whether the drawings from *d'* to *o'* represents an open slot or a closed guide.

A. It represents a closed guide, that is closed on top. It is not closed at the bottom.

Q. 5. What does the dotted line from *d'* to *o'* represent?

A. It represents that this guide is closed on top from *d'* to *o'*—that is, that the guide continues to the point *o'*.

Objected to by counsel for the complainant on the ground that the patent speaks for itself.

Q. 6. The inner side of the closed paper guide is plainly shown at *d'*. Does or does not the dotted line from *d'* to *o'* represent that inner side as continuing to the point *o'*?

A. It does on that side of the tube.

Q. 7. When you made the drawings for Pollard's patent, did or

did you not have a tube before you furnished by him from which to make the drawings?

A. I had a model from which I made the drawings. I do not know who furnished the model; I suppose it was the invertor; I receive- it from his attorney.

Q. 8. Please examine the tube now shown you marked X, and state whether the tube so furnished you and from which you made the said drawings was or was not in any way similar to the tube marked X; and, if any similarity, please state the same.

Objected to by counsel for complainant, the witness not being an expert in machanics and not having the original model before him to compare with Exhibit X.

A. So far as the guides are concerned in outward appearance they seem similar.

Q. 9. In the tube in your hand, does the guide on the left-hand side correspond with said guide?

A. This model does not exactly correspond to the drawings in all its features; but so far as the guides are concern- it does. A part near o' in this model has been cut out, which was not the case with the model from which I made the drawing.

Q. Is there any difference whatever between the said drawings and the left-side closed paper guide or tube X from d' to o'?

Objected to by counsel for complainant because in the letters patent there is no mention of a spiral guide; nor is there any
75 proof that there is any spiral guide in the original model or in tube X.

A. Not that I can see.

Q. 11. Tube X has on the left-hand side a closed paper guide running from d' to o'. Do or do not the drawings accompanying Pollard's said patent represent such a guide?

A. They represent a slightly spiral guide closed.

Q. 12. The first claim in Pollard's patent is as follows: "1. In a cigarette machine, a tube having two converging guides, one for each edge of the paper wrapper, one guide terminating in an abutment to hold one edge of the paper extended and the other passing in front of and up to a slit or opening formed along the line of said abutment to force the opposite edge of the paper wrapper under, so that the first edge will overlap the same, as set forth." In the tube marked X the closed paper guide on the left-hand side extends up to, over, and in front of the abutment. Does or does not the drawing show the left-hand guide to extend up to and in front of the abutment?

A. It shows it extending up to the abutment.

Q. 13. Examine the tube now shown you, marked X X, and state whether or not you have ever made any drawings of that tube; and, if so, when and at whose instance.

A. I have, about two weeks ago, at the instance of D. B. Strouse.

Q. 14. Examine the drawings now shown you in two separate

sheets, marked D D, and say whether or not these are the drawings last referred to.

A. They are.

Q. 15. State whether or not they ac-urately represent tube X X.

A. They do.

Q. 16. Please examine tube now shown you, marked "Exhibit Tube," filed with deposition of E. T. Pollard taken in this cause, and state whether or not the drawings made by you for the E. T. Pollard patent above mentioned were made from this tube.

A. They were not.

Q. 17. Look at the pieces on the tube marked "Exhibit Tube," which go across top side from *d'* to *o'*, and state whether any such pe*i*ces are shown in the drawings accompanying the Pollard patent.

A. They are not.

Q. 18. If you had made the drawings for said Pollard patent from that tube, would or would you not have shown the three cross-pieces last above referred to?

A. I would.

Q. 19. Examine the two side pieces at broad end of tube through which the axes of the roller runs and state whether those pieces correspond with such side pieces in the drawing accompanying the Pollard patent.

A. In the drawing they are not shown as long as in the tube. I suppose they answer the same purpose.

Q. 20. Had you made the drawings from tube marked "Exhibit Tube," would or would you not have made the side pieces last above named to correspond in the drawing with those on the tube?

A. I would.

Q. 21. Look at the tip on the end of the paper guide extending underneath and from the roller and state whether or not any such thing is shown in the drawings made by you for the said Pollard patent.

A. There is a guide shown for the paper.

Q. 22. Do the drawings show any such tip or point as you see attach- to the paper guide in tube marked "Exhibit Tube"?

A. The drawings shows no such tip. It simply shows the guide.

Q. 23. Examine, please, tube, marked X and say whether or not the drawings made by you for said Pollard patent correspond with the side pieces through which the axes of the roller run, with the roller and with the paper guide?

76 A. Not exactly with this paper model, but essentially the same.

Q. 24. A comparison of the roller in tube marked "Exhibit Tube" with that in tube X shows that the roller in tube X is much larger than the roller in "Exhibit Tube." With which of said rollers, if either of them, do the drawings made by you for the said Pollard patent agree?

A. They agree with the one marked X.

And in answer to cross-interrogatories propounded by counsel for complainant the witness certifies as follows:

X Q. 1. The application for the Pollard patent mentioned in these depositions was filed on Sept. 14th, 1883. When did you make the drawings from the model?

A. I don't recollect.

X Q. 2. You have said that "Exhibit Tube" differs from your drawings furnished with the letters patent of Pollard. Does "Exhibit Tube" differ in any other way from these drawings further than that the two guides are entirely concealed and covered over in your drawing, while in said "Exhibit Tube" said guides are exposed to the abutment and the tongue of the tube is held down by cross-pieces?

A. This roller in "Exhibit Tube" is smaller than in the patent and the paper guide has a projecting tip underneath, which is not shown in the patent. The wall on the right-hand side in the patent extends up higher than in the "Exhibit Tube" and is on a level with the abutment d^2, which is not the case in "Exhibit Tube." By wall I mean the part extending from *o* to E, in figure 7, of the Pollard patent.

X Q. 3. Has not "Exhibit Tube" the same paper guides as in your drawings?

A. It has paper guides, but not constructed exactly — Pollard's patent.

X Q. 4. How do they differ?

A. Pollard's patent (Fig. 7) shows a closed guide slightly spiral from d' to o', whereas the exhibit shows an open guide closed at intervals by cross-pieces, beginning at the tongue.

X Q. 5. Are those guides in said letters patent in any way closed up more than in "Exhibit Tube" or are they merely covered over on top of the tongue?

A. They are closed on top all the way, d' to o'.

X Q. 6. Are they not as freely open underneath said covering as they — in "Exhibit Tube"?

A. They guides are open below and closed on top.

X Q. 7. Are the guides in any way closed on top so as to effect the running of the paper in them?

A. The guides are closed on top and open below to allow free passage of the belt of paper.

X Q. 8. To what scale are those drawings made?

A. They are not made on any particular scale. The Patent Office does not require it. These figures are made on different scales.

Redirect Q. 1. Do you profess to be an expert in mechanics?

Ans. I do not.

R. Q. 2. Examine, if you please, figure 5 of the drawings made by you for Pollard's patent and you will see just above d' the end of the figure reversed and passing back for a short distance on the inside. What does that represent?

Objected to on the ground that the patent must speak for itself.

A. Figure 5 represents a transverse section on the line *y y* of figure 3, and the part represents — shown in figure 7.



Fig. 6.

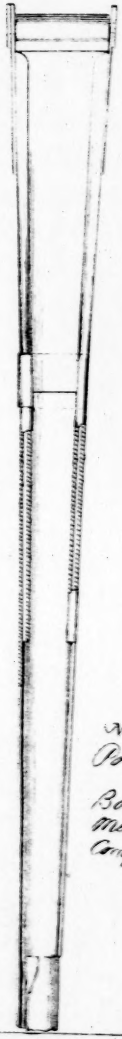


Fig. 7.



Fig. 8.

No. 1195.
Pollard
&
Bossack
Machine
Company
} p 79.

Fig. 1.



Fig. 2.

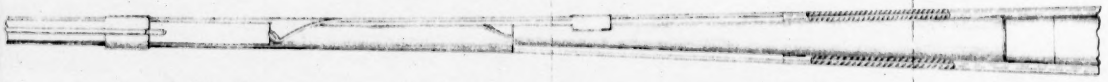


Fig 4



Section on line 44

Fig. 3.



Section on line x x

Fig. 5.



No. 11955
Pollard
&
Barlow
Machine
Company

A 78

It is agreed by counsel that the exhibits referred to in the foregoing deposition may be retained in possession of counsel, to be filed hereafter with the papers in the cause.

A. RUPPERT.

77 Subscribes and sworn to before me this 17th day of August, 1887.

PHILLIP MAURO,
Notary Public.

DISTRICT OF COLUMBIA:

I, Phillip Mauro, a notary public in and for the District aforesaid, do hereby certify that the foregoing deposition of Anthony Ruppert was taken at the time and place aforesaid, and was attended by John Dunlop, solicitor for E. T. Pollard, and D. B. Storuse, solicitor for the Bonsack Machine Company, and Anthony Ruppert as witness, who is of sound mind and lawful age, and that said witness was duly cautioned and sworn before the beginning of his deposition, and that said deposition was reduced to writing by me and was signed by said witness in my presence; and I further certify that I am not of counsel or in any way interested in the result of said cause.

And I further certify that it was agreed between counsel that the subscriber should act as special examiner in said cause without a commission issuing for that purpose.

Witness my hand and notarial seal this 17th day of August, 1887.

[Seal Phillip Mauro, Notary Public, District of Columbia.]

PHILLIP MAURO,
Notary Public, D. C.

(Here follows diagrams marked pp. 78 & 79.)

80 *Deposition of James A. Bonsack.*

AUG. 18, 1887.

The deposition of James A. Bonsack, taken before me, Alexander Ramsey, a notary public of the State of Pennsylvania, residing in the city of Philadelphia, at my office, No. 32 South 3rd street, in said city, this 18th day of August, 1887, to be read in evidence in behalf of the Bonsack Machine Company in a suit now pending in the circuit court of the United States for the western district of Virginia, at Lynchburg, wherein E. T. Pollard is plaintiff and the Bonsack Machine Company is defendant, which said deposition is taken without notice by consent of parties.

Present: John Dunlop, Esqr., attorney for plaintiff; D. B. Strouse, Esqr., atterney for defendant.

JAMES A. BONSACK, having been duly sworn, deposes as follows:

By counsel for defendant:

1 Q. What is your name, age, residence, and occupation?

A. James Albert Bonsack; 27 years old; I reside at No. 1530 Arch

street, in the city of Philadelphia, and I am a mechanical engineer and invertor.

2 Q. State what inventions you have made.

A. The Bonsack cigarette machine and the printing press for same, the cigarette labelling machine, and label bronzing machine, cigarette packing or straightening machine, and an improved printing press for labelling machine.

3 Q. How long have you been engaged as inventor?

A. About eight years.

4 Q. Have you any interest in the Bonsack cigarette machine now?

A. I have none whatever; I own some stock in the company; I am simply a stockholder.

Q. Are you or not an expert in drafting as well as mechanics?

A. I am.

5 Q. In your various mechanical devices, state who does the drafting.

A. I do all my own drafting, so far as combining all the parts and designing the same. I generally get a man to work out the details for me simply to save time.

6 Q. Do you or your employee do the most difficult work in your drafting?

A. I, most assuredly. I never allow my employee to take a step unless under my supervision.

7 Q. State whether E. T. Pollard as employee of the Bonsack Machine Company succeeded in making any material improvements in the Bonsack cigarette machine; and, if he did, to what extent.

(Mr. Dunlop excepts to this question as a leading question and too indefinite in time, no dates being given—no dates being given as to what time the question refers to.)

A. Mr. Pollard made some changes on the machine, but not to any material extent. He took off a positive driving apparatus that drove the reciprocating distributing belt; this was of no advantage whatever to the machine, with the exception of making the machine run a little easier, and did not make the machine — better work in any respect, or more of it, and theoretically was a disadvantage to the cigarettes, so far as their evenness was concerned. He put some other wheels about the machine that any ordinary mechanic could have done, and that required no ingenuity; he also made a change on the rolling tube that made the cigarettes approximately round; and he made a change on the cutting apparatus, but putting the cutter bed on straight springs, which is a decided disadvantage to the machine, as it makes the machine run harder and makes it more costly. I know nothing else that Mr. Pollard has done towards altering the Bonsack machine.

81 (Mr. Dunlop excepts to this answer, so far as it states what any other mechanic could have done, as irresponsive to the question.)

8 Q. State whether or not Mr. Pollard made any alteration in the pasting device; and, if he did, with what result.

A. Mr. Pollard did make some changes in the pasting device, of a very expensive character, and which were an unmitigated failure. The Bonsack Machine Company had a number of these pasters built, all of which had to be discarded for the original paster.

9 Q. You say that Pollard took off a positive motion that drove the reciprocating belt; what, if anything, did he substitute for that motion?

A. He substituted a belt motion, which gives the reciprocating distributing belt a more rapid movement on its backward trip than on its forward, and for which reason the distribution of the tobacco on the second feed-belt is not so perfect as it would be if the reciprocating distributing belt had the same constant motion.

10 Q. State whether or not the belt motion is as certain *is as certain* positive or cog-wheel motion.

A. Certainly not.

11 Q. State whether or not this fact would effect the even distribution of the tobacco for the cigarette filler.

A. It would, to some extent.

12 Q. The 31st question by Pollard's counsel, in the deposition of E. T. Pollard in this cause on the 17th day of May, 1887, is as follows: "Have the Bonsack machines now at Allen & Ginter's a trough corresponding exactly to that described in Exhibit C"? referring to a trough composed of three belts. In his answer thereto Mr. Pollard said: "There is no such compressing trough in use. The filler is not compressed before entering the tube. The compresser wheel has been removed from described "Y" in figure 3 of patent 247,795, Exhibit C, and set in line with pulleys F^4 and F^6, and the strips that form the trough and now straight; the three steel belts and compressing wheel are not used as a compressing trough, but used as a conductor to carry the loose tobacco from the feed-hopper to the trough of the tube." Please state whether the above statement that "the three steel belts and compressing wheel are not used as a compressing trough, but used as a conductor to carry the loose tobacco from the feed-hopper to the tube" is true or not.

A. The steel belts and compressing wheel perform both, conducting the tobacco and compressing it at the same time.

13 Q. What, if anything, if any, is the difference between compressing of the tobacco in the steel belt trough for the wrapping tube now in use by the company and the original Bonsack wrapping tube?

A. The difference is that the tobacco is not compressed quite so much.

14 Q. Is any principal part of the machine except the wrapping tube different now from what it was when Pollard was employed by the company? If so, state what it is.

A. There is no principal or material part of the machine that is different now from what it was when Pollard was first employed by the company that would effect the production of the machine with the exception of a change made on the wrapping tube.

15 Q. State to what extent and with what success you operated the Bonsack machines as originally built.

A. I run the original wooden machine at Allen & Ginter's for some time in the summer of 1881, I think, and I *rp*oduced work to Allen & Ginter's satisfaction, and Allen & Ginter paid me for what work I did while there. They paid me seventy-five dollars ($75.00) for the work I did, which shows the extent to which the machine was run in their house. The royalty then was thirty cents per thousand, as it is now, and after running the machine for
82 that time I was sufficiently well satisfied with its working to ship it to Philadelphia for the purpose of having iron machines built, and especially so as it was understood with Messrs. Allen & Ginter that I should send them an iron machine as soon as it could be built. The first completed iron machine that was made in Philadelphia was sent to Allen & Ginter.

16 Q. Did you or did you not run the machines as originally built in Europe?

A. The machines as originally built was run at Messrs. W. D. & H. O. Wills' factory, in Bristol, England, with such satisfaction for the Messrs. Wills that they bought the patent right for Great Britain from the Bonsack Machine Company for a large amount. That original or wooden machine the Messrs. Wills have continued running, I suppose, up to the present time, although they have several iron machines that were built in Paris. The tube that was on the machine when I exhibited the machine to the Wills was the same tube that was used when the machine was running at Messrs. Allen & Ginter's. Before shipping the wooden machine to Europe it was run in Lynchburg, the same tube being on the machine, for a large number of citizens of Lynchburg who wanted to take stock in the company that was then being formed; the machine worked to every one's entire satisfaction.

(Mr. Dunlop excepts to said answer so far as it is not responsive to the question, irrelavent, and undertakes to state the opinion of citizens in Lynchburg as to said machine, and also on the witness' supposition as to what is being done now by Messrs. Wills, of Bristol, with said machine.)

17 Q. You said that Pollard made changes in the rolling tube which made the cigarettes ap-roximately round. State whether the tube referred to is the one patented by Pollard or the tube he afterwards made for the Bonsack Machine Company and which is now used by the company.

A. The tube that I referred to is the one which the Bonsack Machine Company is now using.

18 Q. Please examine patent issued to E. T. Pollard, dated July 22nd, 1884, No. 302,521, and say whether or not that patent is for improvement on your originaly rolling tube; and, if so, state in what exactly *in what* such improvement or improvements as claimed by Pollard in his said patent consists.

A. This patent is unboubtedly issued as an improvement on my tube. This improvement consists simply of a spiral paper guide on

the left-hand side of the tube that prevents the paper from shifting in that direction on its passage through the tube. I mean prevents its shifting to the left-hand side of the tube.

19 Q. Do you or not intend to say that the closed spiral paper guide on the left side of the tube from *d'* to *o'* is the only improvement made by Pollard on the Bonsack tube?

A. Pollard has located a roller at the end of the tube. The bridge A, figure 3, which conveys the compressed tobacco roll from the compressing machanism to the wrapping tube was made by Pollard also.

20 Q. In Pollard's claims he claims a tube having two converging guides. State whether or not either of those guides was shown *and* by yourself in your patent No. 238,640, dated March 8th, 1881.

A. Certainly; my claims and drawings cover a guide on the right-hand side of the wrpaping tube that reaches to about the point *o'*, figure 2, of Pollard's patent. There are also two guides on the left-hand side of the wrapping tube covered by my claims that reach to a point X X, figure 2 of Pollard's patent.

21 Q. State, then, exactly what it is that Pollard claims which is not covered by your patent.

A. The spiral paper guide already alluded to, which is simply an extension of my left-hand paper guide and to serve the same
83 purpose, which is to keep the paper running properly through the tube—that is, to prevent the same from varying or shifting to the left-hand side of the wrapping tube.

22 Q. Do you or not mean to say that the only improvement made by Pollard on your tube and claimed by him in *him* claims is the extension of your closed guide on left side of the tube from *d'* to *o'*, small figure 7 of Pollard's patent?

(Mr. Dunlop excepts to the question as a leading question. Examining counsel can repeat the previous question, but cannot suggest the answer thereto which he wants of the witness.)

(Question put in a different form.)

Q. State exactly what improvement on your tube is claimed by Pollard which was not covered by your patent number 238,640, dated March 8th, 1881.

A. He claims a guide passing in front of and up to a slit or opening formed along the line of said abutment to force the opposite edge of the wrapper under.

23 Q. Is that or not the only improvement claimed by Pollard which was not covered by your said patent?

A. It is, Pollard's second claim being substantially the same as his first.

24 Q. How and where is that improvement shown in the drawings of Pollard's patent?

A. It is shown by the drawings in figure 2, figure 3, and plainly in figure 7, and the left-hand guide is also distinctly shown in figure 5.

25 Q. What letters and lines in figure 7 show that improvement?

A. It is shown by the lines running from *d'* to the point *o'* in figure 7.

26 Q. What does the dotted line from *d'* to *o'* in figure 7 represent?

A. It represents the entending edge of the spiral paper guide.

27 Q. Do you mean the inside or outside edge?

A. The inside edge.

28 Q. In figure 7 at *d'* the end of a closed guide is apparent. State how far, according to the drawings, that closed guide extends.

A. It extends to the point *o'*.

29 Q. Is the line of the closed paper guide straight or spiral, or what is its course?

(Mr. Dunlop excepts to this question, as the patent speeks for itself.)

A. As a guide for the paper it must necessarily be spiral. It is a physical impossibility for it to be a guide for the paper and not be spiral. It could not be otherwise and perform its functions as a guide for the paper.

30 Q. Why?

A. Because if any material with parallel edges, such as cigarette paper, is drawn through a circular tube the edges of the paper will naturally assume a spiral form in its course through the tube, and necessarily the guide must be spiral to touch the paper throughout its course and thereby performing its functions as a guide.

31 Q. What was the purpose of Pollard's improvement as set out in the specifications and claims in his said patent? I refer to his claims from 93 to the end of 98.

A. Just as he says: "Thus forming a guide which is closed around the edge of the paper strip so as to support and guide the unpasted margin to almost the very point where the pasted margin is closed upon it." His claims are to force the opposite edge of the wrapper under so that the first edge will overlap the same, as set forth.

(Mr. Dunlop excepts to this answer.)

32 Q. Have you or not at hand a tube exactly such as are now being used by the Bonsack Machine Company on its machines?

84 A. Yes. It is the tube marked X X referred to in the deposition of A. Ruppert.

33 Q. State whether or not tube X X has any such paper guide on the left-hand side as is described and shown in Pollard's said patent.

A. No. Pollard claims a guide that passes in front of and up to a slit or opening formed along the line of said abutment to force the opposite edge of the wrapper under. The tubes used on the Bonsack machines at present have no guides passing in front of and up to a slit or opening formed along the line of said abutment to force the opposite edge of the wrapper under. In fact, the tube now used has no guide whatever the functions of which are for the above-set-forth purpose, the paper being allowed to run freely through the tube,

seeking its own course without hinderance. There is not part of the tube as claimed by Pollard that forces the wrapper under the finishing edge of the tube, as this edge is carried under by the belt.

34 Q. Referring to the tube X X, I see that the closed paper guides are extended to a point some two and a half inches from the large end of the tube. For what purpose are these paper guides so extended?

Answer. They are simply a convenience for attaching the elastic tongue—that is, it makes the parts easier put together. It is not at all necessary that they should run further than the large end of tube.

34 Q. What effect, if any, would the extension of these guides to the end of the tongue have upon the running of the paper?

A. None whatever.

35 Q. Why?

A. I take that back in saying none whatever. These guides may slightly determine the course of the paper to an infinitessimal extent, an extent that is no practical benefit whatever, the paper being so delicate that when it is directed out of its course by an uneven pressure in the tube it immediately folds and crumples up on coming in contact with the so-called spiral guide.

36 Q. If, as you say, the guide such as Pollard made and claimed would not change the course of the paper as it passed through the tube, but simply crumple its edges, what effect, if any, would that have upon the lap in the paper around the cigarette?

A. It would make a very poor lap and would look badly by reason of the wrinkle caused by its coming in contact with the spiral guide, and for that reason it is better to construct a tube without any guides, so that the paper shift to the one side or the other by reason of any undue or unequal pressure within the tube the paper will not become wrinkled, and, further, by having such a guide such as Pollard shows and claims in his drawings and specifications, any small particles of tobacco are likely to lodge up against the spiral guide, becoming an obstruction for the cigarette paper. With the open gro-ve as now used on the Bonsack machine particles of tobacco cannot lodge, because any particles of tobacco that can enter the gro-ve at all would be perfectly free to move out, thus forming no obstruction for the paper.

37 Q. Are there any differences, mechanically or in principle, between the solidly made tube with the closed paper guides as described by Pollard in his patent and the tube in use by the Bonsack Machine Company, having open slots and an elastic tongue; and, if there be any, what are their effects on the workings of the tube?

A. Yes; there is a vast deal of difference both in the mechanical construction and the principle involved. The mechanical construction of the tube now used on the Bonsack machine is much simpler than the tube patented by Mr. Pollard. The construction of the tube on the Bonsack machine both mechanically and in principle is such as to enable the operator to easily or re-dily adjust the tube to altering the size of the cigarettes. Should the cigarette be slightly too large the operator can press the tongue slightly down, thereby

reducing the size of the cigarette, and should the cigarette be
85 slightly too small the operator can raise the tongue, thereby slightly enlarging the cigarette. This elastic toung-e is also susceptible of a horizontal adjustment as well as a perpendicular adjustment. Should the paper be running too low on the right-hand side of the tube, on which side the paste is applied to the paper, the operator can readily force the tongue to the left-hand side, thereby increasing the pressure on the left-hand edge of the paper, which will at once cause the right-hand edge of the paper to run somewhat higher, so that the paste can be applied to the proper position on the paper. The Pollard tube, as shown and described in his drawings and specifications, is not susceptible of any such adjustments. If the Pollard tube should not be made correctly in the first place it would be very difficult task to so adjust it that the paper would run correctly; it would require the tube to be unsoldered and remanipulated for adjustment.

38 Q. Examine the tube now shown you, marked Exhibit Tube, and the same filed with the deposition of E. T. Pollard, heretofore taken in this cause, and state whether or not the drawings, specifications, and claims in Pollard's patent describe a tube similar to this.

A. No; they do not.

39 Q. Examine tube now shown you, marked X, and the same referred to in the deposition of A. Ruppert, heretofore taken in this cause, and state whether or not this tube corresponds with Pollard's patent.

A. There are some slight differences between this tube and the drawings, but it does not differ in any essential part. The tapering part of the tube extending from *x x* to *o*, figure 3, and more clearly shorn in figure 7, is precisely the same thing as the tapering part of tube X; that part of the drawing referred to in figure 3 is so exactly like the tapering part of tube X that the drawings could have been made from the same.

40 Q. Look at Pollard's patent, line 95, and say whether you understand that description as describing a closed paper guide.

A. Yes; it describes a closed paper guide precisely the same as tube X, the paper guide as is on tube X, and corresponds exactly to that part of the claim which specifies a guide passing in front of and up to a slit or opening formed along the line of said abutment to force the opposite edge of the wrapper under, and the guide on the right-hand side of the tube X corresponds exactly with the guide as shown and described in his specifications and drawings.

41 Q. Where is that part called abutment in Pollard's patent located on tube X, and for what purpose is it?

A. It is located at the end of the tapering part of tube X, but on what is termed the cigarette-finishing part of the tube and parallel with the right-hand guide; it is to keep the right-hand edge of the paper in an approximately perpendicular position while the paste wheel is applying the paste to the edge of the paper.

42 Q. Examine two sheets of drawings now shown you, marked D D, and state what tube those drawings describe.

A. These drawings exactly describe the tube X X in every particular.

43 Q. State whether or not you ever saw or knew of a tube with double guides, substantially as shown in Pollard's patent, prior to the year 1883; if so, where did you see such a tube, and by whom was it made?

A. Yes; I have. I made a tube with double guides in 1877, and I made further experiments with such a tube in the spring or summer of 1880. The cigarette machine at that time was in a very imperfect condition, and the double-guide tube choked much worse than the single-guide tube, and was therefore abandoned.

44 Q. Who made tube X?

A. Mr. Pollard either made that tube or had it made.

45 Q. Which was made first—tube X and those like it with closed spiral paper guides or tube X X and those like it with straight open slots?

A. The tube with the closed spiral guides.

86 46 Q. About when and where did you first see the tubes made by Pollard with closed spiral paper guides like tube X?

A. It was in the fall of 1883, and in Paris.

47 Q. Where did you get that tube?

A. Q. It was sent to me from America by Mr. Strouse, the president of the Bonsack Machine Company.

48 Q. Mr. Pollard, in his deposition, in answer to question 93, referring to a conversation between himself and James A. Bonsack (yourself), says: "He told me that he had gotten a letter from Mr. Strouse saying that I would send him a tube to make round cigarettes and a sample of the cigarettes. He said he had not received the tube or the cigarettes, and that he had left Europe and come to America against the company's orders to see this tube, as he could not do anything there." State whether or not you ever made such statements to E. T. Pollard.

A. Most emphatically no. No such conversation occurred between Pollard and myself.

49 Q. Had you received the tube which you say you received in Paris before your return and before this conversation which is said by Pollard to have been had?

A. Yes; certainly I had. I brought the tube back to America with me.

50 Q. Where is that tube now?

A. I don't know, but suppose it is somewhere about Lynchburg. When I got back to America the company had already abandoned the Pollard tube or abandoned it so shortly after I got back, substituting the present style of tube or rather the present kind of tube, that the tube I brought back was never used.

(Mr. Dunlop excepts to this said answer after the word Lynchburg as not responsive to the question.)

51 Q. When did you get back from Europe?

A. I think some time in November, 1883.

52 Q. Do you know anything of the circumstances under which

Robert Thurman, of Lynchburg, began to make the tubes now used by the Bonsack Machine Company? If so, state all you know about it.

A. Shortly before Mr. Strouse and Pollard went to Europe I heard Mr. Strouse instructing Pollard to go to Mr. Thurman and explain to him how these tubes were to be made. Mr. Strouse was very careful to impress on Pollard the necessity of his describing the matter thoroughly to Mr. Thurman and giving him explicit instructions as to every detail and important feature about the tube. I was in at Thurman's when Pollard was there instructing him how to make the tube, and think Pollard furnished Mr. Thurman a set of patterns.

(Mr. Dunlop excepts to this answer so far as it states anything beyond the witness' positive knowledge.)

53 Q. Where did this conversation between Strouse and Pollard occur?

A. At Lone Jack cigarette factory in Lynchburg, Virginia. Mr. Thurman's shop was just across the street from the Lone Jack factory.

54 Q. Did or did not Pollard make any objections to complying with the request made by D. B. Strouse?

A. None whatever.

55 Q. Have you ever heard Pollard at any time prior to the institution of this suit set up any claim against the Bonsack Machine Company about the use of any tube?

A. No, I never heard any.

56 Q. Why was Thurman selected by D. B. Strouse to make the tubes?

A. Thurman is a very skillful mechanic and had been employed before by the company for various purposes.

57 Q. For whom did Thurman make the tubes and who ordered him to make them from time to time, and who paid for them?

87 A. Thurman made the tubes for the Bonsack Machine Company and the company ordered tubes whenever occasion required, and the company paid for the same.

58 Q. Where were you when Pollard was first employed by the Bonsack Machine Company?

A. I was in Europe.

59 Q. According to your testimony the only change made and claimed by Pollard on the tube invented and patented by you is the extension of a paper guide from d' to o', figure 7, in Pollard's drawing. State whether or not, in your judgment, the extension of that spiral paper guide involved any inventive genius that would render it at all patentable.

(Mr. Dunlop excepts to that question, it not being shown that the witness is an expert as to what is patentable.)

A. My opinion is that the extension of the left-hand guide, as claimed by Pollard, has no patentable feature, as it simply consists in an extension and not an invention.

60 Q. Did not your patent and tube show a paper guide on the right-hand side similar to that extended by Pollard on the left?

A. Yes; the only difference is that my guide forced the edge of the paper on the outside of the finishing part of the tube, while Pollard's left-hand guide forced the left-hand edge of the paper inside.

61 Q. Where are the Bonsack machines now built, and how long have they been built there?

A. They are built in Paris, Europe, by Gotendorf & Co., and have been built there since 1883.

62 Q. Who superintended the building of the first machines at Gotendorf's?

A. E. T. Pollard.

63 Q. How many tubes does Gotendorf furnish with each machine?

A. I know that he furnishes more than one.

64 Q. Were the machines made by Gotendorf intended for America as well as for other points to which the company sends machines?

(Mr. Dunlop excepts to this question as leading and because the witness has already testified that he left Europe in the fall of 1883, and that he is only a stockholder in the company and so in no way takes any part in the management of the company and in its orders further than as a stockholder.)

A. Yes.

65 Q. Did Gotendorf send any of the first lot of machines built by him and superintended by Pollard to the United States of America; and, if so, were tubes sent with those machines?

A. Some of those machines were sent to the United States and tubes were sent with each machine.

66 Q. Examine the tube now shown you marked X X X and say where it was made, and whether the tubes first sent from Paris were similar to it.

A. This tube was made in Paris by Gotendorf & Co., and the first tubes sent from Paris were similar to it.

67 Q. In the tube X X X there are three cross-pieces passing over the tongue. State for what purpose they are there.

A. They are there to support the tongue in its proper position.

Cross-examination.

By Mr. DUNLOP:

1 X Q. You say that you are a stockholder in the Bonsack Machine Company. Have not your relatives some interest therein?

A. My father is a stockholder in the company, and I think one of my brothers has a small amount of stock in it.

2 X Q. Were the changes made by Pollard referred to in your answer to the 7th question in chief approved of by the Bonsack Machine Company and allowed to remain?

A. Yes; they were to a certain extent, but there is one
88 change, notably the change in the cutting apparatus, that was approved for a time. I know that the company would have that part changed, only that the machines are being built by Gotendorf, and it would be expensive to change them again.

3 X Q. Did not Pollard very much simplify the Bonsack machine, patented by you, and remove a great deal of the machinery as unnecessary for its working?

A. No, sir; there — some additions made on the machine after it was patented; in the iron machines I drove the reciprocating distributing belt by positive mechanism; this positive mechanism Pollard took off and substituted a belt motion exactly like in every essential feature the driving apparatus that I had on the wooden machine; I mean the positive arrangement on the iron machine was for the purpose of giving a constant and unvarying motion to the reciprocating distributing belt, which the belt motion, substituted by Pollard, did not give.

4 X Q. You say in the same answer that Pollard made a change in the rolling tube that made the cigarettes ap-roximately round. What do you mean by the rolling tube?

A. I mean the tube which wraps the paper around the filler.

5 X Q. Do you mean the tube marked X?

A. I do.

6 X Q. Were not the cigarettes made by that tube much rounder than made before, on the Bonsack machine?

A. The cigarettes were somewhat rounder than the cigarettes made by the tube used on the Bonsack machine up to that time.

7 X Q. How long was that kind of tube used on the machines of the company?

A. I cannot —, but, as I stated in my deposition, the company had abandoned them when I returned from Europe, or abandoned them shortly after.

8 X Q. How do you know that they were used by the company at all?

A. Mr. Strouse sent me a tube while I was in Paris, telling me that that was the kind of tube they were using.

9 X Q. You say that tube X was made by E. T. Pollard, or Pollard had it made; how do you know that?

A. The style of workmanship on this tube corresponds precisely to the work on the tube that was sent me to Paris. I saw a good deal of Mr. Pollard in Lynchburg, Va., and learned, from conversation with him, that he made the tubes of this style, and I know, from officer- of the company, that they had no one else to make this kind of tube.

(Mr. Dunlop excepts to so much of this answer as stated what the witness learned from the officers of the company.)

10 X Q. Were not the three steel belts forming a compressing trough in your patent, No. 247,795, dated October 4th, 1881, and the compressing wheel over that -rough, and pressing the tobacco down in the trough, for purpose of compressing the tobacco to the usual

size of a cigarette, or even smaller, so that when the tobacco passed into the rolling tube from said compressing trough the rolling tube was simply for the purpose of rolling the paper around the filler already formed, and not at all for compressing any further the filler?

A. The rolling tube, as I patented it, did not compress the tobacco as much as the tubes now used on the machines do, but the tobacco expanded sufficiently after leaving the compressing ap-aratus to require the rolling tube to compress it to a certain degree.

11 X Q. In your patent just named your describe that compressing trough and wheel as forcing down the tobacco to cause it to be compressed into an approximately square filler; was the compression in the rolling tube sufficient to change the approximately square filler into the round filler necessary for a good marketable cigarette?

A. The rolling tube, as I patented it, made a cigarette marketable in every respect.

By consent of parties the taking of these depositions was adjourned until to-morrow morning, August 19, at same time and place.

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12 X Q. Does the present trough and wheel working in it compress the filler as much as it — formerly, before Pollard changed the tube?

A. Not quite so much.

13 X Q. To what degree of difference do you suppose the filler to be when it — passing from the compressing ap-aratus to the tube now used by the company from what it was before Pollard changed the tube?

A. From twenty to twenty-five per cent., I suppose.

14 X Q. When did you go to Europe?

A. I was in Europe twice. It was the latter part of the summer of 1882 when I was there first, and I made my second trip to Europe February 3rd, 1883.

15 X Q. When did you leave Europe in 1883 and return to America?

A. I think it was in November.

16 X Q. State as near as you can what day you left Paris in November, 1883.

(Mr. Strouse excepts to this question for the reason — does not state that he left Paris in November, 1883, but that he thinks that he left Europe in 1883.)

(Mr. Dunlop waives that question and asks another.)

17 X Q. What day and month in 1883 did you leave Paris to return to America?

A. I think about the 8th of November, but I am not at all certain; I may have left earlier.

18 X Q. What were you doing in Europe at that time in 1883?

A. I was exhibiting the Bonsack cigarette machine in various places.

19 X Q. Were you superintending the making of any machines there at that time?

A. I saw the work started at Gortendorf & Co.'s, in Paris, showing them how many castings from each patent were needed for a machine, but left before much work was done. About the extent of the work was getting in the castings; there was also a little lathe and planer work done, but not much.

20 X Q. Were Gotendorf & Co. then, before you left Paris in 1883, making cigarette machines for the Bonsack Company?

A. As I have stated, they had done some work on the machines, and those machines were for the Bonsack Machine Company.

21 X Q. Were they old machines or new machines on which this work was done?

A. They were new machines on which this work was done.

22 X Q. By whom built or made?

A. They were built by Gortendorf & Co., under E. T. Pollard's supervision—that is, from the time that Pollard went to Paris.

23 X Q. I am asking now about making machines in Europe during your stay there in 1883. Please confine your answer to that period of time and say whether Gotendorf & Co. or any one else had orders then to make machines for the Bonsack Company—cigarette machines.

A. Gotendorf had a contract with the Bonsack Company for ten (10) machines, I think; it may have been but eight (8).

24 X Q. Were they executing that order when you left Paris in 1883?

A. They were, but the contract with Gortendorf required that the Bonsack Machine Company should send a party there to see that the work was properly done; to at least accept the machines after they were finished. The Bonsack Company, to save time and trouble, as I had left Europe without their consent, had E. T. Pollard to go to Europe to look after the work.

25 X Q. Were any of those machines built by Gortendorf finished before you left Paris in 1883?

A. Not one.

26 X Q. How many machines had you for exhibition or work in Europe in 1883, up to the time you left for America in that year?

90 A. Two machines.

27 X Q. Where did you have them?

A. One machine was in Brussels, Belgium, and the other machine was running in the factory of W. D. & H. O. Wills, Bristol, England. The machine in the Wills factory was the original wooden machine.

28 X Q. Did the machine in Belgium belong — the Bonsack Company?

A. Yes.

29 X Q. How many orders for machines had you or the Bonsack Company received in Europe up to the date if your leaving Paris for America in 1883?

A. We had not received any positive orders for machines, but the

Wills told us that as soon as their business increased to an extent to justify them in putting in more machines they would do so, which promise they have carried out by putting in two iron machines.

30 X Q. Are not the house of W. D. & H. O. Wills the largest tobacco manufacturers in Great Britain?

A. They are; but when we sold the patent right for the Bonsack machines their manufactury of cigarettes was rather limited, their enormous business being done principally in chewing and smoking tobacco.

31 X Q. Were those two iron machines bought by Wills of the Bonsack Company?

A. They were.

32 X Q. When were they bought?

A. I do not know exactly when.

33 X Q. Are those iron machines exactly the wooden machines bought by Wills?

A. The principle of the wooden and iron machines were precisely alike. There were some differences in their mechanical construction, and in the mechanical construction only.

34 X Q. State how they differ mechanically; whether — two iron machines are not exactly like the machines now sold or used by the Bonsack Company or more like the said wooden machine.

A. The machines are more like the machines now used by the Bonsack Company; in fact, the differences are very trifling. I am speaking of their mechanical construction. The principle of the machine sold to the Wills was precisely the same as the wooden machine.

35 X Q. Have not those two iron machines sold to the Wills the same kind of tubes as are now used on the Bonsack machines?

A. I suppose they have.

36 X Q. You have said that you received in Paris in 1883 from Mr. Strouse a tube exactly similar to Exhibit X, filed in this cause and referred to in A. Ruppert's deposition. When did you receive that in Paris? How long before you left Paris in 1883?

A. I should suppose three or four weeks. It may have been longer.

37 X Q. How did you receive it?

A. I think by a European express.

38 X Q. How long generally does it take to send by express a parcel from Richmond or Lynchburg, Va., to Paris?

A. I should suppose from ten to twelve days.

39 X Q. Were not objections made to the Bonsack machines in Europe before you left Paris in 1883 that they did not make round cigarettes?

A. There was some prejudice against the machine on that account, but we had encouraging prospects for selling the machine in Europe. The machine was exhibited in Brussels to a commission sent by the Spanish government expressly to see the Bonsack machine. The machine gave good satisfaction in every respect, but up to the time I left Europe we had not gotten an order from the Span-

ish government, but this was due, I think, to the red-tapeism and natural slowness of the European governments to adopt any new inventions. The Spanish government was deterred from taking the machines much earlier than they did on account of a large — of operatives that the machines would have thrown out of em-
91 ployment and who would have created trouble.

(Mr. Dunlop excepts to so much of said answer as undertakes to give the reasons why said machines were not sold in Spain and other European countries.)

40 X Q. Did you exhibit the Bonsack machine in Europe in 1882?

A. The wooden machine was sent to Rome, Italy, in that year, but was not exhibited in operation. The machine was sent there simply to conform to the requirements of the patent laws. It had been patented in Italy previous to that. The machine was not exhibited in operation in Europe in that year, but shown to a commission in Italy to show that we had complied with the law.

41 X Q. When you were in Europe in 1883, were you not engaged in trying to improve on the Bonsack machine so as to make rounder cigarettes?

A. I was. As I have previously stated, there was some prejudice against the machine because it did not make a rounder cigarette, and I was getting up an ap-aratus to overcome this prejudice, thinking that it would assist to an easier introduction of the machine.

42 X Q. Did that ap-aratus consist of a chain or not, or was a chain a part of it?

A. A chain was a part of that ap-aratus.

43 X Q. What did you do with the tube that you received from Mr. Strouse in Paris, as mentioned before by you?

A. I brought it back to America with me.

44 X Q. Where is it now?

A. I suppose somewhere in Lynchburg, as I have already stated.

45 X Q. Did you go to Europe in 1883 as agent of the Bonsack Company and under its orders?

A. I went — Europe in 1883 by order of the Bonsack Company, but not exactly as their agent; I went there to exhibit the machine and further the interest of the Bonsack Company in any way that I could. Mr. Strouse, the president of the company, was in Europe at this time, and of course was the company's authorized agent.

46 X Q. Was Mr. Strouse in Europe at the time you left Paris in 1883 to return to America?

A. Mr. Strouse was not, having left Europe in May of that year.

47 X Q. Did you see him in Europe from May, 1883, to the day you left Europe for America in 1883?

A. I did not.

48 X Q. Were you not in Paris in 1883, at the time just previous to your departure therefrom in that year, to superintend the machines ordered of Gotendorf by the Bonsack Company under the agreement between them to have some one present in Paris to supervise the construction of the machines?

A. I came to Paris about the middle of 1883, and supervised the work from the time it was commenced up to the time I left.

49 X Q. Why did you leave Paris then without the consent of the Bonsack Company?

A. The contract with Gotendorf required the company to furnish a complete set of working drawings by which to build the machines. Fearing that there might be some mistakes in those drawings which, if the parts of the machines were made to, would cost the company a large amount to correct, and also realizing how badly the machines were needed here and also expecting orders from the Wills and the Spanish government, I concluded to place the exhibit machine in the hands of Gorendorf & Co. so as to save ourselves time and possibly expense. In any experiments that I wanted to make I found it difficult to get along in the shop, as I do not speak French and as there was but one party in the shop capable of assisting me, which was the manager, Mr. Shine; therefore, to expedite my experiments, I left for America.

50 X Q. Do you mean by the exhibit machine named in your last answer the machine you have above said you had in Brussels?

92 A. I do; that machine Gotendorf had brought from Brussels to his shop.

51 X Q. As you are a fine draftsman yourself and had that exhibit machine before you, could you not have corrected any errors in the drawings furnished to Gotendorf?

A. I could have done so, but it would have been a very tedious and lengthy *jod*. Gotendorf was anxious to get the machine alluded to above as exhibit machine because it would be a great assistance to his workman in building the other machines.

52 X Q. From whom did Gotendorf get those drawings?

A. He got them from the Bonsack Machine Company.

53 X Q. Did not those drawings that he then had when you left Paris in 1883 correctly represent that exhibit machine above mentioned and could not machines exactly similar to it have been made from those drawings?

A. I am by no means — that those drawings did exactly represent the exhibit machine above alluded to. We built the three machine- from the original drawings in the city of Philadelphia, and I found that some mistakes had been made in the drawings that cost the company considerable to have changed. Such mistakes are liable to be made by any engineer, especially in a machine that is so elaborate and intricate as the Bonsack machine. The original drawings were corrected and such alterations as we found necessary were made, but even with this examination and correction of the drawings it was possible for errors to be overlooked. As Gotendorf was making a number of machines, any mistake in the drawings would have been made in every machine that he first contracted for. The extent of these corrections would have had to have been born- by the Bonsack Company.

54 X Q. Did you bring to America all those drawings from — Gotendorf was building said machines?

A. I did not.

55 XX Q. Did you order Gotendorf to stop making those machines when you left Paris in 1883?

A. I did not. On the contrary, he was instructed to push the work as vigorously as possible.

56 X Q. Did Mr. Shine, Mr. Gotendrof's manager, speak English?

A. He did.

57 X Q. Did you ever try the tube like Exhibit X filed in this cause, sent to you by Mr. Strouse in Paris, as above stated by you, on any Bonsack machine in Europe before you left in 1883?

A. No; I never tried the tube that Mr. Strouse sent me on any machine in Europe or anywhere else.

58 X Q. Did not Mr. Strouse tell you that the one at Allen & Ginter's was making very good round cigarettes before you left Paris in 1883?

A. He did.

59 X Q. When he sent you the tube which you received in Paris did not he tell you that that was the kind of tube by which they were made?

A. He did.

60 X Q. Why did you not then try it on one of the machines then in Europe?

A. I was in Paris at the time I received the tube. The machine was in Brussels, and I was very busily engaged and was already making my arrangements or was thinking about leaving, and intended placing the machine with Gotendorf. I could — see any benefit to be derived from going to Brussels simply to try that tube.

61 X Q. When did Gotendorf bring the machine from Brussels to Paris?

A. I cannot say whether the machine was brought from Brussels to Paris before I left or not.

62 X Q. Did you not see said machine after you got said tube from Mr. Strouse?

A. I do not think I did.

93 63 X Q. When you arrived in America in the fall of 1883, as you have stated above, did you go straight to Lynchburg or did you go to Richmond first?

A. I went to Richmond first.

64 X Q. Did you go to Allen & Ginter's then?

A. I did.

65 X Q. How long did you stay there?

A. I cannot remember exactly, but it certainly was not long.

66 X Q. Whom did you see when there that you know by name?

A. I do not remember seeing any one but Pollard.

67 X Q. Were you in the factory an hour at that time?

A. I suppose I was.

68 X Q. Were you there more than an hour; and, if more, how much more?

A. I cannot say whether I was there longer than an hour or not.

69 X Q. Did you examine the machine operated by Pollard or under his supervision?

A. I did in a general way, but not critically.

70 X Q. Did you have any conversation with him as to the cigarettes made by him?

A. I do not remember, but it is not unlikely that I did.

71 X Q. Who has made all the machines of the Bonsack Co. since they entered into that agreement with Gotendorf?

A. Gotendorf & Co., of Paris, France.

72 X Q. Did the wooden machine mentioned by you above make as good cigarettes as the iron machines used by the Bonsack Company prior and up to the 26th June, 1883?

A. It did make as good cigarettes if it was properly handled. The trouble with the wooden machine was that it was more liable to get out of order than the iron machine.

73 X Q. Did it make cigarettes as fast as the iron machine?

A. For a short time it would, but it was not capable of standing any lengthy strain, and for that reason it was not run as fast as the iron machines.

74 X Q. How many did it make in a day?

A. I suppose as much as 50,000 to 60,000 and maybe as much as 70,000.

75 X Q. How long did you run the wooden machine of Allen & Ginter's?

A. I cannot say as to the exact time, but run it long enough to get $75.00 for my work at the rate of thirty cents per thousand, the same royalty that is charged by the company.

76 X Q. Did Allen & Ginter accept all the cigarettes made on the said wooden machine?

A. They did not. I carried on a series of experiments by Mr. Ginter's permission, using his tobacco free of charge. They object of these experiments was to further perfect the machine so as to know as clearly as possible what I should do and what changes and modifications should be made on the iron machines I at that time contemplated building. I made numerous mechanical changes on the wooden machine which were embodied in the iron machine. These changes were such as are incident to any new invention.

77 X Q. Had the Bonsack Company been formed at that time when Mr. Ginter allowed you the use of his tobacco?

A. No; it was not.

78 X Q. Was not Mr. Ginter one of the original or early stockholders of the Bonsack Company?

(Mr. Strouse excepts to this question as irrelevant.)

A. Mr. Ginter was one of the original and early stockholders of the company, but was not a stockholder at the time I made the experiments in his factory. Mr. Ginter showed himself greatly interested in the machine from the time he learnt that such was being built. One of his agents, a Mr. McCool, I think, came to the woolen mill at Bonsack, Virginia, and examined the machine carefully and was well pleased with the work and invited me to go with him by Richmond, Virginia, on my way North. He held out such inducements that I accepted the invitation, the result

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being that after a talk with Mr. Ginter I took the machine to his factory instead of elsewhere.

79 X Q. Is Mr. Ginter now a stockholder of the Bonsack Company?

(Mr. Strouse objects to this question as irrelavent.)

A. Mr. Ginter is not a stockholder in the Bonsack Company.

80 X Q. When did he cease to be?

(Mr. Strouse objects for irrelavancy.)

A. I do not know.

81 X Q. Did you superintend the running of, or run, the Bonsack machine at Allen & Ginter's after the summer of 1881?

A. I did not.

82 X Q. Who run it or superinte-d the running of it after you left, in the summer of 1881?

A. A young boy by the name of Green B. Foutz, and afterwards E. T. Pollard.

83 X Q. Did the said Foutz run said machine at Allen & Ginter's from the summer of 1881 to the time when Pollard took charge of it?

A. He did not, as the wooden machine was moved to Philadelphia and an iron machine was not sent to Allen & Ginter's until the fall or winter of 1882. Foutz was with the iron machine for a short time before E. T. Pollard took charge.

84 X Q. You stated that you went to Europe in the summer or fall of 1882; how long did you remain there?

A. I was gone some two and a half or three months, and then I went again on 3rd of February, 1883.

85 X Q. In Pollard's patent there is what you designate in answer to question 19, direct examination, what you designate a bridge, marked A, figure 3, in Pollard's patent, which conveys the tobacco in the tube, now used by the company, from the trough immediately preceeding it, called by you compressing mechanism; what is the bre-dth of the gap between said trough and tube in the Bonsack machine which — between X^3 and F^6 in figure 1 of your patent, No. 347,795?

A. In the operating machine there was no gap at all between the end of the tube and the belt wheel; the guide which extends oblique upward and then forward in a horizontal direction was bent with a very small radius, so as to permit the end of said guide coming up in the closest possible proximity to a perpendicular line drawn through the certer of front steel belt wheels; there was a slight drop caused by the curved end of said guide and curviture of front perpendicular steel belt wheel; this drop in the operating machines was bridged in a similar manner to the bridge A, figure 3, Pollard's patent.

86 X Q. Was it so bridged in the Bonsack iron machine at Allen & Ginter's under the charge of Mr. Foutz?

A. As to that I cannot say, as I was not in Richmond at all while Foutz had charge of the iron machine.

87 X Q. Was not the machine made under your orders in Philadelphia?

A. Yes, it was; but for some reason or other it was not furnished with either tube or bridge, although the machine was complete in every other respect.

88 X Q. How many machine- had the Bonsack Company in operation on the 26th June, 1883?

A. One machine; that at Allen & Ginter's.

89 X Q. Did you not see that machine in operation before you left for Europe in February, 1883?

A. I did not see the machine in operation until after I had gotten back from Euprope?

90 X Q. Did you never see that machine till you got back from Europe?

A. Yes; I saw it at Philadelphia, and I think that I was in Richmond while a party by the name of Horne was setting the machine up there.

95 91 X Q. Have you got one of your wrapping tubes as used in the Bonsack machine before Pollard had anything to do with it about Lynchburg?

A. I have not, but suppose one can be found about Lynchburg.

92 X Q. What percentage was there in the working of your machine when you left Mr. Ginter's, in the summer of 1881?

A. I do not know. The percentage was greater when I first started the machine than it was just before I took it away. The reason that the percentage was less towards the last was that I had made various improvements on the machine.

93 X Q. Were the iron machines made by or for the Bonsack Company prior to the 26th June 1883, according to said improvements, or not?

A. The improvements put on the iron machines were the same as those on the wooden machine, but as I have already stated, there were various mechanical alterations added or made on the iron machines.

94 X Q. On what other iron machines in this country other than that one at Allen & Ginter's, up to 26th of June, 1883, were there any such improvements?

A. The three iron machines built in the United States all had the same improvements, one of which machines was the machine at Allen & Ginter's, another was the machine in Europe, and the third was sent to Cuba.

25 X Q. In your answer to the 37th direct question you said that the tongue of a tube now used by the Bonsack Company can be easily adjusted to the requisite size. Thus you say, "Should the cigarette be slightly too large the operator can press the tongue slightly down, thereby reducing the size of the cigarette, and should the cigarette be slightly too small the operator can raise the tongue, thereby slightly enlarging the cigarette." To do this would it not be necessary to unsolder the tongue?

A. Most assuredly not.

96 X Q. You have said that Mr. Strouse, the president of the

company, ordered Pollard to go to Thurman and tell him how to make tubes for the Bonsack Company. Was Pollard paid anything by the Bonsack Company for showing Thurman how to make any of those tubes?

A. As far as I know, he was never paid anything more than his regular wages.

97 X Q. Who has made the tubes for the Bonsack machines since you returned from Paris, in 1883?

A. Thurman, of Lynchburg, Virginia, made some; Gotendorf & Co., of Paris, France, made some, and a party by the name of Bowles, of Salem, Virginia, makes them now, as I understand, for the American machines, while Gorendorf & Co., of Paris, France, makes tubes for the European machines.

98 X Q. You said that the Exhibit X X X was made by Gotendorf & Co. How do you know this?

A. I know it by hearsay, and also know that they came with the machines built by Gotendorf.

99 X Q. Did you not say to Cayce, at Allen & Ginter's, that you thought that Pollard had moral rights against the company, but you did not think they could be enforced by law, or words to that effect; that he had certainly made the tube, *of* words to that effect?

(Mr. Strouse objects to this question for the reason that the witness is not a party to this suit, nor is he an officer of the Bonsack Machine Company, and the Bonsack Machine Company is neither bound or effected by anything he may have said nor by any opinion he may entertain, and for the reasons the question is improper and illegal.)

A. I remember having *have* had some conversation with Mr. Cayce, but do not remember exactly what I did say. I meant Mr. Cayce to understand that, in my opinion, Pollard had been of some benefit to the machine, and that if the company felt disposed they could pay him something more than his ordinary wages, and
96 while Pollard was *id* duty bound to do everything in his power for the promotion of the interests of the Bonsack Company, still he had taken more than usual interest in the machine, and consequently I felt very kindly towards him and thought the company might recognize his efforts in a somewhat substantial way, but simply looked upon anything the company would do in this way as a gratuitous and voluntary action.

Redirect examination.

By Mr. STROUSE:

Q. You say in your cross-examination that Mr. Strouse left Europe in May, 1883. Who had charge of the company's affairs other than those of attending to the machine at Gotendorf's and elsewhere after Mr. Strouse left?

A. We were exhibiting the machine at the Musee de Nord in Brussells before Mr. Strouse left, and also negotiating the sale of the patens in Europe to Max Jereski and a party by the name of Mar-

cuse for the sum of one million francs, and they accepted an option for three or six months, for which they paid the sum — one thousand dollars cash. From the beginning of this option Jereski and Marcuse had charge of matters, and, as I should have stated heretofore, the machine was taken to Austria and was run in the government factory, Hamburg. We did not succeed in obtaining a positive order from the Austrian government. While they objected to the cigarettes not being rounder, their chief objection was that we had no printer on the machine, all their brands of cigarettes being printed, I think, without exception. I left Austria and went to Paris for the purpose of making both an ap-aratus to round the cigarettes and also to build a printer for the cigarette machine. Finding great difficulty in getting along in Gotendorf's shop with experiments, especially as we could not secure the privilege from the French government to operate the machine in Gotendorf's shop, I had the cigarette machine sent to Brussels for the purpose of exhibiting it to the Spanish Commission. For this reason, as well as those already given, I returned to America and at once set about building a printer, which was so necessary for the further introduction of our machines, especially in Europe.

Further deponent sayeth not.

JAMES A. BONSACK.

STATE OF PENNSYLVANIA, *City of Philadelphia,* } *ss:*

I, Alexander Ramsey, a notary public for the Commonwealth of Pennsylvania, residing in the city of Philadelphia, do hereby certify that I was attended at the time and place mentioned in the foregoing depositions by D. B. Strouse, Esqr., solicitor for the Bonsack Machine Company, respondent, and John Dunlop, Esqr., solicitor for E. T. Pollard, complainant in said cause, and James A. Bonsack, the witness, of sound mind and lawful age, and who was duly cautioned and sworn by me and examined, and whose deposition has been reduced to writing be me, was signed by said witness in my presence; and I further certify that I am not of counsel or in any — interested in the event of said cause; and I further certify that counsel for both parties waived the requirement of any commission for the taking of said deposition.

Witness my hand and official seal at the city of Philadelphia, in the said State of Pennsylvania, August 19th, 1887.

[Seal Alexander Ramsey, Notary Public, Philadelphia, Pa.]

ALEXANDER RAMSEY,
Notary Public.

Notary fee for taking deposition, $50, paid by defendant.

97 *Deposition of D. B. Strouse.*

DEC. 27, 1887.

The deposition of D. B. Strouse, Esqr., taken by consent of parties before me, James W. Palmer, a commissioner in chancery for the circuit court of Roanoke county, at the office of said D. B. Strouse, at Salem, Va., this the 27th December, 1887, to be read as evidence in behalf of the defendant in a certain suit depending in the circuit of the United States for the western district of Virginia, wherein E. T. Pollard is plaintiff and the Bonsack Machine Company is defendant.

Present: John Dunlop, Esqr., of counsel for plaintiff; Robert E. Scott, counsel for defendant.

D. B. STROUSE, Esqr., being sworn, says:

Question by counsel for defendant:

1 Q. State your name, age, residence, and occupation.

A. My name is Demetrius B. Strouse; I am 49 years old; reside in Salem, Va.; am a lawyer by profession, and also president of the Bonsack Machine Company.

2 Q. How long have you been president of the Bonsack Machine Company?

A. Since its organization, in 1882.

3 Q. What is the business of said company?

A. The Bonsack Machine Company is the owner of cigarette machines known as the Bonsack machines. These machines have been introduced in several foreign countries and are being operated in a number of cigarette factories in the United States.

4 Q. Are the appliances used in the machines of that company covered by patents? If so, state generally what they are.

A. The machines are covered by patents, one of which was issued to Jones and Darlington, of New York, which is now held by the Bonsack Machine Company, and two patents issued to James A. Bonsack, also now held by the Bonsack Machine Company. Office copies of the drawings and specifications have been filed with the answer in this case.

5 Q. Of how many parts does the Bonsack machine consist?

A. I have never counted them, but the builder's estimate puts them at eight hundred.

6 Q. Do you know E. T. Pollard, the complainant in this cause? If so, please state how you have known him and whether he ever was in the employment of the Bonsack Machine Company.

A. I do know E. T. Pollard; have known him since June, 1883. He was in the employment of the Bonsack Machine Company from about the 25th of June, 1883, until the first of October or November, 1884.

7 Q. Please state under what circumstances and for what purposes said Pollard was employed by said company.

A. I had been in Europe and returned in May (I think the latter

part of May, 1883). The company at that time had four machines—one at Bristol, England, one in Belgium, or possibly at that time in Austria, one at the factory of Allen & Ginter, in Richmond, and one in Cuba. Mr. James A. Bonsack, our inventor, was with the machine in Europe exhibiting it, with a view to its introduction in European countries. After my return to America I learned that the machine at Allen & Ginter's was not giving satisfaction, and they had informed the company that unless the machine could be made to work better they desired the machine taken away. I went to Richmond about the 19th of June, 1883, and had a conference with the firm of Allen & Ginter, who are Lewis Ginter and John Pope, the result of which conference was an agreement that the company would try to so correct the machine as to make it work to their satisfaction, I then stating that we had a man in view who I believed could do so. In the absence of Mr. Bonsack, other members of the company or other stockholders & myself had been making inquiries to find, if possible, a suitable man to send to Rich-
98 mond. Mr. P. A. Krise, the secretary and treasurer of the company, and Major Flood, a stockholder in the company, both then and now residing in Lynchburg, Va., had spoken to me of Mr. E. T. Pollard, who then also lived in Lynchburg, and had recommended his employment, Major Flood especially urging that Mr. Pollard was quite a genius as a mechanic and certainly the best man for our purposes of whom he knew. After these conversations I went to see Mr. Robert Thurman, a fine mechanic of Lynchburg and who I had understood had recommended Mr. Pollard to Mr. Krise, and I got his opinion of Mr. Pollard's ability to handle our machines and adapt them to the desired work. Thurman's opinion was that Pollard was the best man the company could get. I was also referred to another party in Lynchburg who was said to know Pollard's ability as a machinist, and who also recommended Mr. Pollard as a machinist in the highest terms.

The name of this gentleman I have now forgotten. Afterwards, I think, on my return from Richmond I went to see Mr. Robert Thurman again and requested him to send for Mr. Pollard, which he did, and Mr. Pollard came to Mr. Thurman's shop. I cannot remember the words that were spoken between Mr. Pollard and myself, but the interview was very short. I told Mr. Pollard what I wanted; that we were in trouble with our machine at Richmond and that I wanted some one who could help us out, and asked him if he thought he could do so. I remember distinctly that he said he thought he understood the Bonsack machine; that he had made parts of it for Bonsack while he was getting up his original machine, and either in that conversation or a few days thereafter in Richmond—I am not sure which—he told me of a certain machine he had invented for the manufactory of plug tobacco, which he described as ingeni-us. Mr. Pollard said in Thurman's shop, after saying he understood the Bonsack machine, that he was sure that he could bring the machine out all right, or words to that effect; that he at that time had no job and would be glad to get employment with the Bonsack Machine Company, and that he could go to work im-

mediately. I asked him what he would charge us for his services, and he answered $75 per month and his railroad fares in addition to Richmond and whenever he should travel at the request of the company. I told him in substance that I had no objection to the terms he made and we agreed at what time (which was a very few days thereafter) we would meet in Richmond, which was, as well as I remember, three or four days thereafter, Mr. Pollard, as he said, desiring to go by Staunton or some other place on his way to Richmond.

8 Q. How did the Bonsack machine operate prior to the employment of Mr. Pollard by the Bonsack Machine Company, as above indicated?

A. The tube used on the Bonsack machine prior to Bonsack's going to Europe and on the machine in England and Europe were made by Bonsack himself. The machine in Europe of which Mr. Bonsack had charge operated very well, running about as well as the machines now run, except that the cigarettes it made were not entirely round, and this was the great objection urged — Messrs. Ginter and Pope to the work made in their house. They especially demanded of me in my interview that the cigarettes must be round.

9 Q. State whether Pollard ever made any tubes or tube-forming dies for the Bonsack machine; and, if so, state under what circumstances they were made.

A. On the 25th of June, 1883, I went to Richmond, taking Mr. Robert Thurman with me, who having a shop of his own in Lynchburg, with, as he said, much work on hand, and who positively refused to assist us more than two or three days, and Mr. Pollard met us in Richmond. Mr. Thurman had made the tubes then on the machine in Richmond, and whose help I very much desired in connection with Mr. Pollard's to assist in so altering the machine as to make it work to the satisfaction of Messrs. Ginter and Pope. Mr. Thurman was with us in Richmond for about two days, when he had to leave on account of his own affairs, but he and Polland and I all agreed that the trouble was in the tube, and that if
99 we succeeded in getting the machine to work so as to give satisfaction changes would have to be made in the tube. Pollard and myself, after Mr. Thurman left, discussed at great length the tube. I had taken with me copies of the drawings and specifications of Bonsack's patents, which Pollard and myself, at a room at Ford's hotel which was occupied by myself and I think Pollard also during my stay in Richmond, examined with great care, and in examining the drawings in those patents we found that the tube on the machine made by Thurman did not in one important particular correspond with the Bonsack drawings. The Bonsack Machine Company had invested one hundred thousand dollars in this enterprise, and I was intensely anxious and solicitous that our machines be made to work to the satisfaction of the manufacturers, and for this reason I have a most distinct recollection of the efforts in that direction which we were then making. I now file with my answer a tube, marked X X X X, as an exhibit in this cause, which is substantially the tube (leaving off the guides which conduct the

paper and belt to the tube) patented by Bonsack in his original patent. By reference to this tube now filed it will be seen by observing the open end of th- tube that there are on the left side separate guides for the belt and paper. In the tube on the machine there was but one guide on the left side. That guide had to be wide enough for the paper, and the belt necessarily being of less width than the paper could play from side to side, and thereby cause the pasted edge of the paper to lap on the opposite side of the belt, thus preventing the paper from pasting and causing a waste to be made, which was also a matter of complaint on the part of Messrs. Ginter and Pope. Mr. Pollard admitted this to be a material defect in the tube, and Mr. Thurman was immediately requested to make a tube having two guides on the left side as shown in the Exhibit X X X X, which he did. Mr. Pollard, however, contended that the Bonsack tube was otherwise defective, and gave it as his opinion that material changes would have to be made in that tube before the machine could be made to work to the satisfaction of manufacturers. He further said that he knew that he could make a better tube, and one that would make the machine work all right; and so positive did he become in this opinion that he remarked that if he could not make a better working tube than the Bonsack tube he would agree not to charge the Bonsack Machine Company anything for his services. Of these conversations and especially of his last remark I have the most distinct recollection, because these assurances were gratifying to me. I urged him to go on and make any and all changes he saw fit until he should have a tube that would answer our purposes well. He told me he would want some tools and material, which I told him to get without stint. He spoke especially of needing a mandrel, which he desired me to have made for him.

NOTE.—In the above answer the following words, commencing "the Bonsack Machine Company had invested one hundred thousand dollars in this enterprise" and ending "I have a most distince recollection of the efforts in that direction that we were then making," are excepted to by counsel for plaintiff as not responsive to the question.

J. W. PALMER, *Com'r.*

10 Q. In the deposition of E. T. Pollard filed with the papers in this cause, a certified copy of which I have handed you, in answer to question 119, Mr. Pollard says that he "never saw drawings of the Bonsack machine until he went to Washington." Do you know whether or not that statement is correct?

A. It is not correct. As I have stated in my answer above, Mr. Pollard and myself examined the drawings, especially the tube, with great care. This occurred at Ford's hotel, in June, 1883.

11 Q. In Mr. Pollard's same deposition, answer to question 52, he says "he does not remember seeing you at Richmond after you left in June, 1883, till the 5th of September, 1883, the day he, Pollard, went to Washington to apply for a patent." Please state
100 whether you were in Richmond during the time indicated

and whether you saw Mr. Pollard during that time, and state further whether you have any memorandum fixing the date.

A. On the first day of August, 1883, I went from Washington city to Richmond, arriving at the latter place for dinner, and was assigned to room 171 at Ford's hotel and remained till the next day. My business in Richmond at that time was to look after the affairs of the Bonsack Machine Company, at Allen & Ginter's, and I saw Mr. Pollard then at the machine at Allen & Ginter's factory, and had considerable conversation. When traveling on the business of the Bonsack Company my expenses were paid by the company, and my mind is refreshed as to the exact dates of this trip to Richmond by reference to my account book, in which I keep a memorandum of my expenses. I have also referred to the register at Ford's hotel, which shows that I registered at that hotel for dinner on the first of August, 1883, and that I occupied, as above stated, room No. 171.

12 Q. Are you familiar with the handwriting of Mr. E. T. Pollard? If so, what have been your opportunities for knowing his handwriting?

A. I have seen Mr. Pollard's writing, and frequently seen letters written by him to myself and Mr. Krise, our secretary and treasurer, and I think I am familiar with his handwriting.

13 Q. In the same deposition heretofore referred to, in answer to questions 53 and 54, he says he "had no conversation with you, with Mr. Krise, or with any of the officers of the Bonsack Machine Company, as to his alleged improved tube before he went to Washington, on September 5, 1883, and that he had given no description of his tube before that time to any of the parties just named; that *htey* knew that he had made a tube that would make round cigarettes from samples sent by him to Mr. P. A. Krise." Please state what you know of the correctness of these answers to those questions, and, before doing so, examine the depositions I now here hand you.

A. Mr. Pollard's answer to question 53 is not correct. When in Richmond on the 1st & 2nd of August, 1883, as above stated, I saw Mr. Pollard. He then had on the machine a tube made exactly after the order of the tube heretofore filed as Exhibit X in this cause, and the same, or one like it, from which the drawings with Pollard's patent were made. The tube made a rounder cigarette than the Bonsack tube, but not so round as the tubes now used. Mr. Pollard seemed very proud of what he had accomplished; said he was very glad to see me, for he wanted me to see his new tube. I was very much pleased with what he had done, and assured him of that fact. Mr. Pollard, during that visit to Richmond, told me that the Bonsack Machine Company ought to apply for a patent on the extension of the paper guide on the left-hand side of the tube. I told Mr. Pollard that I did not think we could get a patent on it because, in my judgment, it was a mere mechanical change of the Bonsack tube, which involved no invention. Mr. Pollard thought, however, that a patent could be gotten for it, and appeared to adhere to his opinion that the company ought to apply for a patent. Mr. Pollard, in that conversation, never in any way intimated that he though- himself entitled to the benefit of the changes he had made; but, on the other

hand, spoke of the matter only as for the benefit of the Bonsack Machine Company. I now desire to file as exhibits with this deposition a letter from E. T. Pollard, which letter is in his handwriting, marked "Pollard's Letter No. 1," dated August 14, 1883, addressed to P. A. Krise. Also a letter of E. T. Pollard, dated August 17, 1883, addressed to myself, marked "Pollard's Letter No. 2." Also a letter of E. T. Pollard, dated 21 August, 1883, addressed to Mr. Krise, marked "Pollard's Letter No. 3." Also a letter from E. T. Pollard, dated 25 August, 1883, addressed to Mr. Krise, marked "Pollard's Letter No. 4." Also a letter of E. T. Pollard, addressed to myself, dated August 31, 1883, and marked "Pollard's Letter No. 5."

14 Q. In his same deposition Mr. Pollard says, in answer
101 to question 23, he was engaged only to run the machine at Allen & Ginter's, and for no other purpose. Is that correct?

NOTE.—Excepted to by counsel for plaintiff because the contract between Pollard and the Bonsack Machine Company has already been stated by the witness.

JAMES W. PALMER, *Com.*

A. It is not correct. We had a man in Richmond running the machine who has been with Bonsack in all his experiments, and who had gone to Europe to run a machine in Rome, and who has run our machine since. His name was Green Foutz; I think it is Green B. Foutz. Pollard was employed to adapt the machine to the requirements of the manufacturers, and also to operate it; but Pollard wishing more time to work on the machine, including the tube, and recommending a man whom he would like to have assist him, whose name is Gibbs, at his request I employed Gibbs and sent him to Richmond to run the machine, to relieve Pollard, so that he could give attention to improvements in the tube and other parts of the machine. I file here, as exhibit with this deposition, a letter from E. T. Pollard to Mr. Krise, dated the 7th July, 1883, marked "Pollard's Letter No. 7," all of which seven letters are in E. T. Pollard's handwriting.

15 Q. Mr. Pollard further says in his deposition, in his answer to question 63, that in making what he calls his tube he used some of the tools belonging to Allen & Ginter and some that he borrowed from the engineer. Please state what you know about the correctness of that.

A. Mr. Pollard may have used tools as he states. Mr. Pollard requested me to have made for him a steel mandrel. I had it made for him and sent to him. All other tools needed could easily be had in Richmond. I file herewith, as an exhibit with this deposition, a letter written by E. T. Pollard to Mr. Krise, dated 6th of July, 1883, marked "Pollard's Letter No. 8." In this letter he says he had received the tube which was made by Thurman, as I hereinbefore stated I had directed Thurman to make, and also the mandrel.

16 Q. Did Pollard have any use for a mandrel in working on the

Bonsack machine other than in connection with work on the tube? If so, what?

A. He had not.

17 Q. What is a mandrel?

A. The mandrel which Mr. Pollard requested me to send to him, the receipt of which he acknowledged in his letter, the last herein filed above, was made of steel, of a shape to correspond with the inside of the tube, the purpose of which mandrel was to enable Mr. Pollard in making tubes the more easily and accurately to bend up the brass in proper shape and proper size for the tube.

18 Q. In Pollard's deposition he further says, in answer to question 122, that the Bonsack Machine Company never paid him for the tools, mandrel, and material used in making what he calles his tube. State whether that is correct.

A. It is not correct. I herewith file, as exhibits in this cause, an account made off in E. T. Pollard's handwriting and against the Bonsack Machine Company in his favor for $112, commencing June 26, 1883, and running to July 30th, 1883, with receipts and checks attached to said account showing its payment by the Bonsack Machine Company to E. T. Pollard in full. In said account, as of June 30, he has charged the company as follows: "Paid for tools and material for tube and shop rent, $3.45." Mr. Pollard afterwards explained to me that it was difficult for him to get tools just such as suited him, soldering irons, &c., and that he had gone to a shop not far from Allen & Ginter's, where for a small sum the proprietor had allowed him to work on the tubes, using the proprietor's tools, &c., and that rent constitutes this item in part. On the fourth of July he has charged for sheet brass, 40c.; the same date, shop room; to work and material for making tubes, $1.50. On the 24th July he has charged for sheet brass, 40c.; solder, 15c.; on the
102 25th July, sheet silver for tube, $1.50. The sheet brass and sheet silver and solder were for use in making the tubes. The foregoing exhibit is marked "Pollard's Account A." I also file, as an exhibit marked "Pollard's Account B," an account in Pollard's handwriting and in his favor and against the Bonsack Machine Company for $82, with receipts thereto attached showing payment in full, which account appears to cover the month of August, 1883. In this account he has charged the company as of August 23 with heating-stove for soldering, $1, and as of August 26 with sheet brass, $2. I know of but little, if any, soldering about the Bonsack machines except in work on the tubes, and the sheet brass was for the tubes. The sheet brass which he charged the company in these two accounts would be sufficient to make from six to ten tubes.

19 Q. Are you acquainted with the cost of brass used in making one of these tubes, taking those filed as exhibits in this cause? If so, state what it is.

A. We furnished the brass for our present tube-makers, and from an estimate made by me some time ago I thought that the cost of the brass would not exceed ten (10c.) cents a tube.

20 Q. Pollard claims in his deposition that he worked on what he

called his tube at odd hours when not engaged in the business of the company. Please state what you know of the correctness of this claim.

A. I think it very probable that Pollard did work on the tube when the factory was not running. Factories run the machines irregularly. When they get a little ahead of their orders they stop off the machines, and when pressed often run them at night. Owing to these circumstances we do not pay our men for extra hours, nor do we abate them when not at work. Without any very definite recollection as to the contract with Pollard in this particular, I take it that such was the contract with Pollard. He said in his deposition, in answer to question 90, "That was my understanding when I went with the company, that my salary was never to be docked." It was certainly Pollard's duty to do all that he could after the machine was stopped to perfect it, as he had agreed to do.

NOTE.—Plaintiff's counsel -- to the closing sentense in the last answer.

JAMES PALMER, *Com'r.*

21 Q. Pollard, in his deposition, in answer to question 45, says that he was in Washington city September 5th, 1883, applying for a patent, and that Nottingham and himself examined the Bonsack and the Hook cigarette patents and several others, which same statement, to wit, that he was in Washington on September 5th, 1883, is several times repeated. Please state what you know about that.

A. I was in Richmond on the 5th of September, 1883. I found Mr. Gibbs trying to run the machine, and Mr. Pollard absent. On inquiring as to where Mr. Pollard was I was told that he said that he was going off on an excursion. I file as an exhibit with this deposition a letter written by Mr. Pollard to Mr. Krise, dated the 6th of September, 1883, in which letter he says that "Mr. Strouse was here yesterday, and I had gone to see a brother of mine that was sick and did not get to see him." (Exhibit Pollard's Letter No. 9.)

So much of the foregoing answer as contains heresay is excepted to by counsel for plaintiff.

JAMES W. PALMER, *Com'r.*

22 Q. How was the machine at Allen & Ginter's working on the 5th of September, 1883, while Pollard was away from his business applying, as he alleges, for his patent?

A. Mr. Gibbs had not been in Richmond a very great while, and the machine had gotten out of order and he could not adjust it, and I am confident he did not make 5,000 good cigarettes that day, with which I was exceedingly annoyed.

23 Q. There is filed with Pollard's deposition a paper intended to be executed by Pollard and the Bonsack Machine Company.
103 State what you know about that paper.

A. After learning through a newspaper that Pollard had himself applied for a patent on the tube I felt that he was acting in very bad faith to the company, and I went to Richmond to see him

about it; at least, that was a part of my business there. I prepared the paper myself, which covered, as I thought, the contract between Pollard and the company, which contract had not been put in writing. I showed that paper to Mr. Pollard and asked him to sign it, which he declined to do.

24 Q. In answer to question 43 Pollard undertakes to give an account of what occurred next day at the factory of Allen & Ginter. State as nearly as you can what did occur.

A. When I went to the factory Mr. Pollard was not there, but in a very few minutes came in. Mr. Pollard told me that he thought he was entitled to patent the tube; that if we did not want the tube he would take it off the machine, or words to that effect. I told him that he could not take the tube from the machine; that we had paid him for making it; had paid for the material in it, for the appliances used, the rent of the shop in which to make it, and that the tube was the property of the Bonsack Machine Company. Mr. Pollard referred to the fact that I had told him the day before that if it was his purpose to proceed as he had done in applying for the patent that the company would not keep him, but would discharge him, and he complained of the wrong that would be done him by such a course.

The further examination of this witness is adjourned until *the* to-morrow morning at the same place.

JAMES W. PALMER, *Com.*

Office of D. B. Strouse.

SALEM, VA., *Dec. 28th*, 1887.

Pursuant to adjournment the further examination of this witness is resumed.

Present: The same attorneys as on yesterday, and also R. G. H. Kean, another of the attorneys for plaintiff.

25 Q. Pollard in his deposition heretofore referred to, in answer to question 71, says Mr. Krise offered him $25 for his work on the tube, and after Mr. Krise left that you asked him of $500 or $1,000 would be an inducement for him (Pollard) to sign the contract, and on his refusing to do so that you said that you would go to Lynchburg and call a meeting of the board of directors and see if there could be an agreement. Before answering you will please examine the 71st question and answer. Please state what your recollection of the matter is.

A. Pollard claimed that he had worked on the tube out of ordinary working hours, and Mr. Krise *tell* him that he, being treasurer of the company, would pay him $25 for extra work. I contended with Pollard that he was doing the company a great wrong, after being especially — to do what he could to adapt the machine to make work which would be acceptible to manufacturers, for which we paid him, as well as for material, appliances, &c., to turn about and say that the company should not have the benefit of the very things in mind when he was employed. I told him in substance that

the company could — retain a man in its employment that would act that way. Pollard disclaimed any intention on his part to prevent the company from using the tube. (This was after the conversation with reference to his taking the tube from the machine.) I asked Pollard what it was, then, that he wanted. He answered that he wanted the company to pay him extra for the tube. I asked him what he wanted the company to pay him. He would not answer. I then asked him if he wanted $500. He said he would not be satisfied with $500, or words to that effect. I then asked whether he wanted $1,000, and he remarked, with some hesitation, that his improvement was worth more than $1,000 to the company,
104 and that he would not be willing to take that amount. These questions were asked by me with a view to ascertain what position Pollard proposed to take in the matter. In this conversation I told Pollard, as above stated, that I would not be willing to continue any man in my employ who had acted as he had done. Pollard seemed to think the company would do him a wrong to discharge him. I did not tell Pollard that I would call a meeting of the board of directors and see if there could be an agreement as to any amount to be paid him for making his tube. When he complained that it would be wrong to discharge him I told him to go on with his work, and that I would talk to members of the board about the matter of his discharge.

26 Q. Did you subsequently lay the matter of his discharge before your board of directors; and, if so, what was the result?

A. I did not formally. I had a conversation with some members about it, and they were of the opinion that if Pollard wanted to remain with the company and was thought to be a man who could serve us to our advantage, and as he had said that he did not intend to prevent the company from using the tube made by him, that we had better keep him. I should have added to my answer to question 25 that in my conversation with Pollard I asked him whether he expected to be continued with the company for the purpose of improving its machine and *and* then apply for patents for such imporvements as he from time to time might make. He answered that he did not expect for any patent on any improvement which he might thereafter make, and this statement was also repeated by me to the members of the board with whom I spoke.

27 Q. Did Pollard agree to the continued use of the tube on the Bonsack machine; and, if so, when?

A. When I told Pollard that he could not take the tube from the machine, because it was the property of the Bonsack Machine Company and not his, as I have hereinbefore stated in this deposition, he consented that the tube should reamin on the machine, and he continued to make other tubes and put them on the machine himself from time to time.

28 Q. How long did the tube remain on the machine and why was it removed?

A. As I have hereinbefore stated, the cigarettes made on the tube make and patented by Pollard, being tube marked X " or one substantially like it," having a closed spiral paper guide on the left side,

made a cigarette more round and more acceptible to the manufacturers than the original Bonsack tube, but the tube did not make the cigarettes entirely round. It was also a tube very difficult to construct. Tobacco stems would sometimes get into the long closed guide, which would prevent the tube from working and was difficult to remove. To remedy these defects Mr. Pollard worked for some time, and finally, as a substitute for tube X, he made the tube substantially like Exhibit X X, since which time, so far as I know and believe, no such tube as Exhibit Tube X has been used on our machines. Tubes substantially like tube X X was made by Mr. Pollard and put on our machines in Richmond by Mr. Pollard himself or was put on by Mr. Gibbs under Mr. Pollard's direction, he having charge of the machine.

29 Q. What is the tube you now use and when was it put on?

A. The tube we now — is just such tube as Exhibit X X, and was put on the machine about the 1st day of December, 1883, by Mr. Pollard. I was in Richmond on, I think, the 8th of November, 1883, and the tube such as Exhibit X was then on the machine. I was in Richmond on the 19th of January, 1884, and a tube substantially — tube Exhibit Tube X X was then on the machine. Mr. Pollard told me that that tube or one like it had been on the machine for several weeks, but I do not remember the number of weeks he stated, if he stated the number. Mr. Pollard also stated that the tube worked very much better than the tube Exhibit X or those made like it. This conversation with Mr. Pollard was had in Lynchburg the latter part of December, 1883. I desire to file as an
105 exhibit with the deposition a letter written by E. T. Pollard to myself, dated the 1st December, 1883, marked "Pollard's Letter No. 10."

30 Q. What means have you of fixing the date*d* just referred to?

A. I remember my trips to Richmond and especially the great interest I took in examining the tube such as X X, and, as to the exact dates, I have refreshed my memory by reference to my memrandum book, in which I charged my traveling expenses to the Bonsack Machine Company, as heretofore stated in this deposition.

31 Q. Mr. Pollard, in the bill of complaint filed in this cause, alleges that the tube used on the Bonsack machine at the time of filing said bill was substantially as that patented by him. Is that correct?

A. It is not correct in so far as the part of the tube claimed by him in his patent is concerned, as before stated. We have been using since about the 1st of December, 1883, tubes similar to Exhibit X X, which has no such closed spiral paper guide as claimed by Pollard in his patent, nor any guide for the purposes set out in Pollard's specifications and claims.

32 Q. In Pollard's deposition, answer to question 74, he says the tube filed with his deposition as "Exhibit Tube" was the same tube which he tried to take off the machine and you would not allow him to do so. Is that correct?

A. It is not correct. As before stated, the tube he spoke of taking

off the machine and for which he applied for his patent was substantially the tube X filed as an exhibit in this cause.

33 Q. He further says, in answer to question 75, that the said "Exhibit Tube" was the same tube for which the drawings in his letters patent were taken. Is that correct?

A. It is not correct. The drawings were taken from a tube almost exactly like tube exhibited in this cause marked X.

34 Q. What is the difference described in Pollard's patents and drawings and the tube previously patented by James A. Bonsack?

A. By examination of the tubes filed in this cause marked X, which is the tube patented by Pollard, and the tube marked X X X X, which is substantially the tube patented by Bonsack, the difference will be readily seen. All that Pollard claims in his patent which was not in the tube patented by Bonsack is the extention to the paper guide on the left-hand side of the tube from the closed end of the tube to the abutment. The tube as patented by Bonsack had a similar guide on the right-hand side, and also a guide on the left from the end of the trough to the point at which the tube is closed. Pollard extended this guide up to the abutment, and this extended guide on the left side is all that he has claimed in his patent which was not previously in the Bonsack tube.

35 Q. What kind of tube is now used by the Bonsack Machine Company? And state how long it has been used.

A. The tube- now used by the Consack Bom*a*pny, and which have been used since about the 1st of December, 1883, are like the tubes heretofore filed in this cause marked X X and X X X, which are substantially the same.

36 Q. What is the difference described in the Pollard patent and the tubes now used by the Bonsack Machine Company?

A. The tube as shown by the drawings in Pollard's patent and described in his specifications and claimed in his claims has a paper guide "which is closed around the edge of the paper strip so as to support and guide the unpasted margin to almost the very point where the pasted margin is closed upon it." In his first claim he describes this same guide as "passing in front of and up to a slit or opening formed along the line of said abutment to force the opposite edge of wrapper under so that the first edge will overlap the same, as set forth." In his second claim (which is the only claim in his patent) he describes
the left-hand closed paper guide as follows: "And the other
106 extending up to a longitudinal slit or opening or formed
along the line of said abutment. In observing Exhibit Tube X you will see along the *the purpindicular* wall extending from the closed paper guide on the right-hand side of the tube a *peice* of brass about $\frac{3}{4}$ inch long standing parallel to the *purpindicular* wall, the object of which said *peice* of brass is to hold the right-hand edge of the paper in a perpendicular position to receive the paste on the under side after the paper passes this *peice* of brass. This *peice* of brass in Pollard's patent is called an abutment. As shown by Pollard's drawings and distinctly set out in his specifications and claims and also shown by Exhibit Tube X, the paper guide patented by Pollard is a closed guide. It is also made to pass almost entirely

across the tube from the left-hand side to the right-hand side. Pollard specifically describes it as "a closed paper guide, which passes over the top of the tube to a point in front of and up to a slit or opening formed along the line of the abutment," and the tube corresponds exactly with this description. Mr. Pollard in his claims also states definitely the purpose for which the said guide was so made, to wit, to force the edge of the paper wrapper under or into the tube at its smallest point. The tubes used on the Bonsack machines, such as Exhibit Tube X X and X X X, have no such guides nor have any guides for any such purpose. By reference to tube X X it will be seen that the paper guides are extended to about three inches from the point at which the tube is first closed. These are in fact not int-ed as paper guides and are too high to eff-ce the course of the paper, but are simply so made for convenience in soldering in the tongue, as will be re-dily be seen by an inspection of the tube X X. The tube X X X has no such guide. The tubes which we now use simply have an open trough up to the abutment. See drawings ("D D," Fig. 7, heretofore filed in this cause) which were made from X X, which tubes we now use. Over this trough is inserted a steel tongue shown in said drawings, figure 5. The tongue being so inserted leaves a straight open slot on each side of the tongue through which the edges of the tape belt and th- paper passes. On the left-hand side the edge of the paper is drawn into the tube by a tape belt, and not by a guide of any sort, and on the right-hand of the tube the edge of the paper, after receiving the paste, is also drawn into the tube by the tape belt. The offices for which Pollard says, in his claims, he constructed his closed paper guide are performed by no guides whatever in our tubes, but by a tape belt. The principle of the two tubes is also different. We have discarded the closed paper guides, and thereby relieved the tube from the annoyance occasioned by the filling of the guides with tobacco or stems. The tube as patented by Pollard was a solid tube, while the tubes we use, having the separate tongue, adapt themselves somewhat to the quantity of tobacco fed into the tube. In the Pollard tubes, if a lump of tobacco passed into the tube, the tape belt would frequently be torn in two and the tube probably ruined in attempting to remove the tobacco, whereas in the tube we use, a lump of tobacco passing into the tube will, if it be not too great, spring up the end of the tongue sufficiently to let it pass, or it may bend the piece of brass which holds the end of the tongue in position, which the operator can easily adjust with such pliers as they have for that purpose. Different conditions of tobacco sometimes require different conditions in the tube. The piece of brass near the end of the tongue is soft and pliable, and the operator can, at his pleasure, raise or lower the end of the tongue sufficiently for his purposes. It is very difficult to get the paper to run exactly right in the tubes. Sometimes it will run too high on one side and sometimes too high on the other side. If the paper runs too high on the right side the operator, using a pair of pliers, can close the brass support
107 near the end of the tongue, thus causing the end of the tongue to rest nearer the wall on the right-hand side of the tube,

which will cause the paper to run lower on the right-hand side. If the paper runs too high on the left-hand side the operator, with a proper instrument, can spread the brass support near the end of the tongue, thereby causing the tongue to rest nearer the left-hand wall of the tube, which will cause the paper to run lower on the left-hand side. None of which principles and advantages are found in the tube as patented by Pollard. To be explicit, I repeat that the guide as patented by Pollard is not on the tube we use, nor have we any guide for the purposes set out by him in his patent.

37 Q. You have said that Pollard made a tube about December 1st, 1883, substantially like the tube now in use. For whom did he make that tube and who put it on the machine?

A. He made it for the Bonsack Machine Company. It was put on the machine by Mr. Pollard or by Mr. Gibbs, who was there assisting him; I do not know which.

38 Q. Who has since made those tubes and at whose instance?

A. Mr. Pollard made several of those tubes before leaving Richmond in December, 1883. In the latter part of December, 1883, Mr. Pollard, being in Lynchburg and I desiring him to go to Europe, at my request instructed one Robert Thurman how to make these tubes. I think he spent a day with Mr. Thurman, possibly more. Mr. Pollard told me that, with a view of having the tubes made by other parties, he had brought with him exact patterns by which the various parts of the tube could be cut out, and without any hesitation whatever he instructed Mr. Thurman how to make the tubes and he told me Mr. Thurman could make them without any trouble, or words to that effect. Mr. Pollard not only did this, but he showed what I thought a very commendable desire to have such tubes made for us as would give the very best results. Mr. Thurman continued to make those tubes from time to time for and as requested by the Bonsack Machine Company, the said company paying him for his work.

39 Q. In Pollard's deposition, in answer to question 128, he says he did not direct Gottendorf & Co. or any one else to make tubes like his. What do you know about the correctness of that statement?

A. If by his tube he meant the tube patented by him his answer is, I have no doubt, correct. If he meant the tubes we are using on our machines his answer is not correct, for not only did he direct Mr. Thurman to make such tubes for us, furnish him with patterns and instruct him how to make them, but while in Paris superintending the building of our machines by Gottendorf & Co. he had made by Gottendorf & Co. tubes for all of our machines then being built, ten in number, and four or six tubes (I have forgotten whether four or six) for each machine, which tubes were made under the supervision of Mr. Pollard and were like the tube X X X, which was made by Gottendorf & Co.

40 Q. Were any of the machines made by Gottendorf & Co. sent to America by Pollard; and, if so, what tubes were sent with them?

A. Yes; some of them were sent to America. All the tubes made by Gottendorf & Co. for our machines were of the kind we now use.

I cannot assert that Mr. Pollard had the tubes ready for shipment with the machines, but, if not, he had them made and they were sent on later. The tubes were made by Gottendorf & Co. for all the machines and by Mr. Pollard's direction. I file herewith a letter from Mr. Pollard to Mr. Krise, headed Paris, France, March 25th, 1884, marked "Pollard's Letter No. 11."

41 Q. Does Robert Thurman make the tubes for the Bonsack machines now; and, if not, why not?

A. Mr. Thurman made our tubes until a little more than a year ago, perhaps till the latter part of the summer of '86, charging us
$5.00 per tube up to the early part of 1886, when he de-
108 manded from us $10.00 per tube, which we paid him for some
time. Being able to make a contract with good men who made as good or better tubes than Thurman made at $3.00 per tube—we furnishing material—I gave them the contract and they are now making our tubes on those terms.

42 Q. What was the change involved in the tube patented by Pollard? And state whether such change involved any invention which was patentable.

NOTE.—Plaintiff's counsel excepts to this question because it calls for an opinion of an expert and also because it involves a question of law.

JAMES W. PALMER, *Com'r.*

A. I am not a professional expert, although for the last five years I have given such matters some thought. The Pollard patent only extends a paper guide which he found on the original Bonsack tube, which Bonsack tube has a similar guide on one side, which tube he worked and with which he was entirely familiar, and it does not appear to my mind that the extension for some inches of a guide already existing or the making of a second guide where one already existed involves any invention whatever, but only mechanical changes, and this I said to Mr. Pollard when he told me he thought the Bonsack Machine Company ought to have the extended groove patented.

43 Q. Examine Pollard's answer to question 31 in his deposition and state how far the statements therein made are correct.

A. In this answer Mr. Pollard says that there is no such compressing arrangement now on the Bonsack machines as that described in Bonsack's patent as composed of three steel belts and a compressing wheel, and that this is not used as a compressing trough, but used as a conductor to carry the loose tobacco from the feed-hopper to the trough of tube. I do not understand Mr. Pollard to mean that this arrangement is not now on the machines, but that, as he states, it is not used for the purpose of compressing the tobacco, but to simply to carry forward the loose tobacco. In this statement Mr. Pollard is in error. Were the tobacco not compressed into a roll it would not possibly enter the tube. The difference between formerly and now is that the compression wheel is now thicker and the tobacco is not compressed so much as before.

44 Q. When and under what circumstances did Mr. Pollard quit

the service of the Bonsack Machine Company? And state further whether it is true, as alledged in Pollard's deposition in answer to question 109, that he had to quit work in Paris before you would pay his account?

A. Mr. Pollard quit the Bonsack Machine Company, I think, on the last of Oct., 1884. When I went to Paris and met with Mr. Pollard he told me he wanted some money and that the company was owing him about such a sum. I thought the bill, including the money he had received from time to time, a very large one. I gave him some money and requested him to make off the bill, which he said he would do, but which he did not do for some time. In the meantime he asked me for money on one or more occasions, which I gave him, I insisting upon having an account, which he finally rendered. I was in Paris at that time, living part of the time at a hotel and a part of the time out of Paris, because just outside of the walls (Paris having grown very much beyond its walls) at a cost to the company of about $10 per week. In Mr. Pollard's account he was charging the company for board as much as 279 francs per month. I complained to him that his charges were very much too great and asked him if he had vouchers for his board, and he said he had not. I asked him to examine the matter and see if there were not some mistake, but did not refuse to pay him his account. When, I think the very next day, to my great surprise, he came up to the boarding house at which I was and told me he did not intend to
109 work any more until I paid his account, I told him I did not think he ought to charge the company any more than the president of the company charged it, but he refused to make any abatement and I settled his accounts. I never once refused to pay Mr. Pollard any money when requested by him. We had been running a machine for the French government for about three months. I had sent a machine to Italy under an agreement with the Italian government (which government manufactures all tobacco), which machine was to be run there on trial. Our great delay in France caused the Italian officials to write me several imperative letters, and they finally wrote that the machine must be started at once or taken from the factory. About this time we concluded a contract with the French government, and I telegraphed to Italy on Friday (I think the last Friday in October) that Mr. Pollard would leave Paris for Florence on the following Tuesday. I had had several conversations with Mr. Pollard about going to Italy, and had procured for him all the tools, &c., that he mentioned as wishing to take with him. When Mr. Pollard was about leaving for Europe in December, '83, he asked me how long I expected him to remain abroad. I told him we had to deal chiefly with governments, and I had found them very slow; that I desired to introduce our machines throughout Europe, and I could form no idea how long it would take, and I insisted that he must take his wife with him and prepare for a long and indefinite stay, which he did. I told him on the Friday above referred to that he must start to Florence on the following Tuesday. He for the first time told me that he would have to decline going. It required a man who had han-

dled our machines considerable to set them up and run them, and for him to desert me at that time would leave me entirely helpless. I called his attention to the great injustice that such a course would do me and urged him not to leave me. He said that his wife wanted to return to America and that he preferred to return. I then offered to pay the expenses of his wife also if he would go to Florence, and to relieve him just as soon as the Italian government would decide as to the machine, and would allow him then to return home, paying his expenses and salary on his return and continue him in our employ. On the other hand, I told him we wanted him in Europe and not in America, and that if he stopped he did it on his own account, and would not be travelling at the instance or in the interest of the Bonsack Machine Company; that I would pay him his wages up to the time he quit, but nothing more. His wages were paid and also his expenses up to that time, but notwithstanding all I said he left me and came home.

45 Q. In Pollard's deposition he speaks of some changes made by him on the Bonsack machine. Did he ever apply for any patent for any such changes, except for the one set up in his bill, or make any charge for his services in connection therewith? And state further when those changes were made?

A. If he ever applied for any other patent I have not known of it. He never made any charges for the changes he made on the machine, unless it be in the matter about the tube, as to which I have testified. Some of the changes were made by him on our machines prior to September, 1883, and some were made afterwards.

46 Q. How many men did it take to run the machine during the time Mr. Pollard was in Richmond?

A. While Mr. Pollard was in Richmond we had but one machine there. It only requires one operator to a machine.

47 Q. If Mr. Pollard's duty referred only to the running of the machine, would it have been necessary to employ Mr. Gibbs to assist him?

A. It would not. Mr. Gibbs was employed at Mr. Pollard's request, to give to Mr. Pollard more time to work on the tube
110 and other parts of the machine. Mr. Pollard's work was more especially on the tube. The other changes he made, as shown by some of his letters filed with this deposition, consisted in changes of wheels, and so forth, which he had made at regular machine shops, and did not make himself. I herewith file as a part of this answer a letter written by Mr. Pollard to myself, dated September 24th, 1883, and marked Pollard's Letter No. 12, in which letter there is a reference to an account for this kind of work. It was also desirable to have some one learn to operate the machine, so that we could maove Mr. Pollard in case we should want him elsewhere.

48 Q. Please examine a copy of the contract between Pollard and the Bonsack Machine Company, dated on December 27th, 1883, filed with the answer in this cause, and state whether that is a true copy of the original; and, further, whether the Bonsack Machine Com-

pany has performed on its part all the requirements of said contract.

A. I believe the copy to be a true copy. I made this copy myself. I believe the Bonsack Machine Company has complied with said contract on its part. The original is in the hands of P. A. Krise, the secretary and treasurer of the company, and will be filed as an exhibit in this cause.

49 Q. In Mr. Pollard's account, filed as an exhibit with this deposition, it appears that he purchased a considerable amount of sheet brass and sheet silver; for what purposes other than making tubes would he need such material?

A. There is on the Bonsack machine a sheet-brass apron about ten inches long and five inches wide and there is a hopper composed of sheet brass, neither of which ever *ware* nor have at all to be renewed or altered. There is a little piece of sheet brass used, being about eight inches long and one inch wide at one end and narrow at the other, which acts as a support to the cigarette roll after it leaves the tube. No sheet silver has been used at all, so far as I know, except in making tubes; and the brass with which we are charged could not have been used about our machines in any such quantity for any other purpose than in making tubes. A part of the sheet silver appears to have been used by Mr. Pollard in making the tube filed in this cause as "Exhibit Tube."

50 Q. After the 27th of December, 1883, did you have any contract for the employment of Mr. Pollard other than the contract of that date, a copy of which is filed with the answer?

A. We had not.

The further examination of the witness is adjourned till to-morrow morning at the same place.

J. W. PALMER, *Com.*

Office of D. B. Strouse.

SALEM, VA., *Dec. 29th*, 1887.

Pursuant to adjournment, the further examination of this witness is this day and place resumed.

Present: R. E. Scott, attorney for defendant, and R. G. H. Kean, one of the attorneys for plaintiff.

51 Q. Please examine tube marked X X X and state what purpose the three cross-pieces, under which the tongue runs, serves.

A. They serve as supports to the sides of the tube to keep them from widening; and they also hold the tongue to which they are fastened in proper position. We have not made or used any of these tubes for about two years.

Cross-examined by counsel for plaintiff:

1 X Q. When was the Bonsack Machine Company incorporated and organized for business? The exact date is not material.

111 A. It was incorporated the 27th of March, 1882, and was organized soon thereafter.

2 X Q. In how many and what countries were the Bonsack cigarette-machines in operation prior to 14th of September, 1883?

A. One was in operation in Richmond, Va., one in Cuba, one at Bristol, England, and one was on the Continent of Europe, where it was exhibited in Belgium, Austria, but it was not in regular operation.

3 X Q. How long had you been in Europe when you left it and returned to the United States in (or about) May, 1883?

A. I left home in July, 1882, I think, and returned in May, 1883.

4 X Q. Were the four machines of which you have spoken in your second answer above all that the company had set up for work?

A. Those four machines were built in America. While in Europe I made a contract with parties in Paris to build the machines. Ten were in the builders' hands, I think, in September, 1883. Mr. Pollard was sent to Paris in January, 1884, to superintend the construction of those machines, as the constructors, Messrs. Gotendorf & Co., would not go on with the work unless some one was there who was familiar with the machines to superintend their construction. It was the understanding between us when the contract was made that we were to furnish a hand to superintend their construction.

5 X Q. Were the four machines which the company had in May, 1883 (located as in your 7th answer in direct examination), then in active operation or merely on exhibition or trial?

A. The machine at Allen & Ginter's was running, but not *the* the satisfaction of the manufacturers. The machine in Cuba was there for trial awaiting my arrival. It had been run to some extent. The machine on the Continent was there for exhibition. We had sold our English patent and one machine to W. D. & H. O. Wills, of Bristol, England, and the machine there, so far as I know and believe, was in constant operation.

6 X Q. Were these four machines exactly alike in construction? If not, how did the one at Allen & Ginter's, Richmond, Va., differ, if at all, from that which was on exhibition or trial in Belgium or Austria—that is, on the Continent?

A. The machine at Bristol, England, was the original machine, constructed by Bonsack on wooden frames. The other three machines were constructed in Philadelphia, and were wholly of iron, and were intended to be exactly alike.

7 X Q. Had you been present at any of the trials or exhibitions of the one on the Continent before your return to the United States in May, 1883?

A. I was present at its exhibition in the Museum in Brussels, where the machine run irregularly—I suppose two weeks in all.

8 X Q. Were not the cigarettes made by this machine of the same character and liable to the same objections with those being made by the one at Allen & Ginter's?

A. The tube on the machine in Brussels was made by Bonsack himself. The tubes then used on the machine at Allen & Ginter's were made by Mr. Thurman. The Bonsack tubes were much better constructed than the Thurman tubes and worked much better than the tubes that Thurman had then made. The manufacturers of

cigarettes who examined the machine at Brussels made, so far as I know, but one objection to the machine, and that was that the machine- were not entirely round.

9 X Q. Who was working the machine at Allen & Ginter's when you went there with Thurman (and Pollard) in June, 1883?

A. Mr. Green Foutz had been working the machine then. I am not certain whether he had been stopped before we went there or not, but I think he had, and perhaps when I was in Richmond a few days before I went there with Thurman and Pol-
112 lard, who met us there. On my visit to Richmond a few days before taking Thurman and Pollard, I myself, as well as Allen & Ginter, was dissatisfied with the work made by that machine.

10 X Q. Where is Mr. Green Foutz now and how long had he been in the employment of your company?

A. I think he is at Bonsack's, in this county. The machine was sent to Allen & Ginter's during my absence, and I do not know at what time, but I think Mr. Foutz was with the machine from the time it went there until May, 1883. He had been in Europe a short time before he went to Allen & Ginter's.

11 X Q. Did not Robert Thurman go with you to Richmond (in June, 1883) to show Pollard how to run the machine?

A. The machine at Allen & Ginter's had given great or much dissatisfaction, and Thurman, being a fine workman and knowing something of our machines, was taken by me to Richmond to give whatever assistance he could to make the machine work, so that the firm of Allen & Ginter would be satisfied with the work and order from us additional machines. Whatever he could show Mr. Pollard as to the running of the machine was, of course, very desirable.

12 X Q. Did Thurman run the machine at Allen & Ginter's at all before — joined you and him in Richmond?

A. Not that I know of.

13 X Q. With the feed arrangement then in use and the tube on that machine was there not great waste of tobacco?

A. The feed arrangement then on the machine was then substantially the same as now. Mr. Pollard changed the motion of the feed-belts and substituted a belt gearing on a part of the feeding arrangement for a positive gearing (that is, cog-wheels). The machine at Wills & Co. has the original feed, and when in Europe last I saw that machine working, and the feed was fully as good as that of the other machines having the alterations. All of our machines make some waste, but the waste of the machine at Allen & Ginter's before Mr. Pollard made tubes for it was occasioned almost wholly by the defective manner in which Mr. Thurman had made the tube.

14 X Q. Your answer to the last question is not responsive. Please say whether or not before Pollard took the machine at Allen & Ginter's in hand there was not great waste of tobacco, and was not that fact one among the grounds of dissatisfaction on the part of Allen & Ginter.

A. There was considerable waste of tobacco, and that fact did constitute one of the objections urged by the firm of Allen & Ginter.

15 X Q. What is the average life of a tube with a brass or German-silver tongue on a machine making average work—I mean how long will a tube last before it is so worn that it will have to be replaced?

A. As far as I know we have never used a German-silver tongue. A tube with a brass tongue, such as "Exhibit Tube," would *ware* if not injured, I think, about three months, but the tubes are necessarily delicate and are often injured by nails passing through and otherwise, so that I do not think the average life of our tubes is more than six or eight weeks. Tubes are sometimes defectively made, so that they will not work satisfactorily, and for that reason thrown aside. This was especially the case in our earlier operations.

16 X Q. The letters of E. T. Pollard, which you have filed with your examination-in-chief, shows that during June and July, 1883, he (Pollard) was in constant correspondence with you and Mr. P. A. Krise, secretary and treasurer of your company. Was not the matter about which you and Krise, writing to him in June and July, 1883 (outside of the amount of work done), the defective working of the machine in parts other than the tube?

113 A. Pollard, in his correspondence and in his conversation with me, had much to say about improvements to the machine, and also about the tube. After we found in Richmond that the chief trouble with the machine was in the tube he, as his accounts show, first set to work on the tube, and, having made a tube to work fairly well, he gave his attention to the other parts of the machine, and much of his correspondence related to other improvements that he thought it better to make.

17 X Q. Did not you in your correspondence with him attribute the defective working of the machine in July, 1883, to the belt and other parts of the machine and not the tube?

NOTE.—Defendant's counsel excepts to this question because the letters are the best answers of what the correspondence was about, and that it is not proper to examine the witness about letters written by him without first producing such letters.

J. W. PALMER, *Com.*

A. I have no recollection of writing any such letter. If I did, I take it that it was after Mr. Pollard had made a tube to work fairly well.

18 X Q. In the letter of E. T. Pollard, July 21st, 1883 (Pollard's letter No. 7), with your examination-in-chief, he begun said letter addressed to you by acknowledging the receipt of the day before (20th) of a letter from you in regard to changes to be made in the machine before it can work satisfactorily ("right," as he expressed it). You are shown these letters, marked respectively S. No. 1, K. No. 2, and S. No. 3 (the last not signed, or, if signed, signed on another sheet, which was then lost). Please examine these papers and say in whose handwriting they are, respectively. Look also at

fourth, dated July 23rd, 1883, marked S. No. 4, and say whose writing it is.

A. The letter dated 12th July, 1883, marked "S. No. 1," is in my handwriting. Letter marked "No. 2" is in the handwriting of Mr. Krise. Letter "S. No. 3," which appears to be only a part of a letter, is in my handwriting. Letter marked "S. No. 4" is in my handwriting.

These four papers are filed as part of this answer, marked as above.

J. W. PALMER, *Com'r.*

19 X Q. Did not Thurman make all the tubes for your machine except those on the machines at Bristol, England, and the one in Belgium (or Austria) prior to the time when Pollard made a tube or the tubes for the one at Allen & Ginter's in the summer of 1883?

A. As I recollect and believe, Mr. Bonsack made himself, with possibly an assistant, all the tubes used by us before he left for Europe, and also the tubes which were used in Europe up to the time that Mr. Pollard went to Europe. The machine was put in at Allen & Ginter's, I think, after Mr. Bonsack went to Europe, and when I returned I found a tube on that machine which was said to have been made by Mr. Thurman and which we found to be defective, as I have stated in this deposition. I think I am probably mistaken in saying according to my information the machine at Allen & Ginter's was put in after Bonsack left. I think it more probable he set up that machine before leaving. My answer to this part of the question is based wholly on information, as I was not here at the time.

20 X Q. When did J. A. Bonsack go to Europe?

A. I think Bonsack met me in Rome, Italy, between the 15th and 20th of September, 1882.

21 X Q. When did Gibbs first go into the employment of your company?

A. After Mr. Pollard went to Richmond a Mr. Hughes was first engaged to assist Mr. Pollard. For some reason, which I do not now remember, Mr. Gibbs was employed instead of Mr. Hughes. I have no means, away from the office of the secretary of the company, of fixing the exact date of his employment, but o think it was about the first or early part of August, 1883.

22 X Q. Did Gibbs sign a paper similar to the one your
114 insisted on Pollard's signing when you and Mr. Krise went to Richmond, in September, 1883? If so, what date did such paper signed by Gibbs bear? I mean was it dated at the date of signing or dated back to his first employment.

A. I do not remember certainly as to a contract being signed by Mr. Gibbs, nor as to its date. If there be such a paper it is in the office of our secretary, Mr. Krise, at Lynchburg. Since Pollard's course towards us it has been our uniform custom to have written contracts with our employees, but, as Mr. Gibbs was employed before Mr. Pollard pursued the course he did as to a patent, I do not know whether a written agreement was required of Mr. Gibbs.

NOTE.—So much of the foregoing answer as is from the words "since Pollard's course towards us," &c., to the end is excepted to by plaintiff's counsel as not responsive to the question and irrelavent.

JAMES W. PALMER, *Com'r.*

23 X Q. Did you not ask Gibbs to try and induce Pollard to sign the post-dated paper you presented, and he refused to sign?

A. I was anxious to avoid any trouble with Pollard about this matter, and it is very probable and I think I did speak to Gibbs about the course Pollard was pursuing towards us, but I have no recollection of having asked Gibbs to try and induce Pollard to sign the paper, and incline to the belief that I did not do so.

24 X Q. Did you, on behalf of your company or otherwise, ever apply for a patent for a tube substantially like that now used by your company; if so, when?

A. I did on the 27th day of September, 1883. I afterwards told Pollard I had done so.

25 X Q. Did you dismiss Pollard after he had refused to sign the post-dated contract which you offered to him about the middle of September, 1883?

A. I did not; all of which I have fully explained in this deposition.

26 X Q. Were the tubes made by Thurman and Bonsack previous to Pollard's improvements made on the model of Bonsack's patent?

A. They were intended to be so, but, as I before stated, Mr. Thurman, in making the tube we found on the machine in Richmond, had departed in one important particular from the drawings, to wit, that it had but one guide on the left-hand side of the trough of the tube instead of two.

27 X Q. In your answer to direct question 36 (the very long answer), at about one-third from the end of your answer, you used the language, "We have discarded the closed paper guide," &c. Whom do you mean by the pronoun "we"?

A. I mean the Bonsack Machine Company.

28 X Q. Were not they discarded in the tubes Pollard made for the first time—*i. e.*, was not he the first person to make tubes in which they were discarded?

A. So far as I know, he was. He was the first person to make such tubes for us.

29 X Q. In your long answer to direct question 36, a little below the point above referred to, you say, "In the Pollard tube if a lump of tobacco passed into the tube the tape belt would frequently be torn into and the tube probably ruined in attempting to remove the tobacco, whereas in the tube we now use a lump of tobacco passing into the tube will, if it be not too great, spring up the end of the tongue sufficiently to let it pass," &c. Would not a lump of tobacco which would lodge in the tube as patented by Pollard so as to *tare* the belt lodge in the portion of the present tube beyond the point where the pasting is applied so as to *tare* the belt?

A. It is necessary to compress the tobacco at the point of
115 the tongue sufficiently to enable the paper to pas- into the tube at the end of the tongue, and hence the tube, to work well, must be made much smaller at the point of the tongue than it is beyond it. This being the case, the greatest pressure would be near the point of the tongue, as will bee seen by an examination of tube X and more especially of tube X X.

30 X Q. As a matter of physics, do you mean to say, as implied in the latter — of the quoted language in my 29th question, that a piece of metal in the form of a part of a cone, as the tongue appears to be, can have any appreciable flexibility to a strain at right angles to its axis?

A. I say that the tongues in the tubes we now use do spring up sometimes, even bending the piece of brass near the point of the tube. I do not say they will recover their original position if forced much out of their position; in such case the operator has to readjust them.

31 X Q. In your answer to 40th direct question you say, in effect, Pollard "had them" (referring to the tubes made by Gotendorf) "made," &c. Do you in fact know of your own knowledge that Pollard had anything to do with either the making of the tubes by Gotendorf & Co. or their shipment to the United States?

A. I sent Pollard to Paris to superintend the building the machines. With each machine and included in the price of the machine Gotendorf & Co. had to make either four or six tubes. On going to Paris I found tubes made by Gotendorf & Co. for our machines similar to tube X X X. I know that these tubes were made by Gotendorf & Co. under the direction of Mr. Pollard. Some of the tubes did not suit Mr. Pollard, and I remember distinctly of Mr. Pollard pointing out to Mr. Gotendorf errors in them which Mr. Gotendorf promised to have corrected. I told Gotendorf that I would not pay for any tubes that were not accepted by Mr. Pollard, and, I think, in Mr. Pollard's presence. Pollard knew that some of the tubes were to come to America, but whether he shipped any to America or not I do not remember. I think all the shipping was done by Gotendorf & Co. under the direction of Pollard before my arrival and under my direction after my arrival.

32 X Q. Is it not a fact that the successful and to the manufacturer the satisfactory operation of the Bonsack machines has been largely due to the improvements made by Pollard, especially in the tube as well as in other parts?

A. No very material improvements have been made by Pollard except in the tube. The tube we now use is a great improvement on the original Bonsack tube, in this, that it makes round cigarettes, which could not be done by the tube originally patented by Bonsack.

Re-examined by defendant's counsel:

1 Q. What kind of a workman was G. B. Foutz as relates to his knowledge of the machine and his ability to run it?

A. Foutz has very little ability as a mechanic. He was the best

operator we then had, but as compared with the operators we now have, with their experience, he would be a poor operator.

2 Q. Did Thurman know how to run the machine by himself?

A. Thurman was a good mechanic and could work on the machine better than Foutz, but Foutz was a better operator. He (Thurman) could not have run the machine well without experience.

3 Q. What object, then, had you in carrying Thurman to Richmond with Pollard?

A. My object was to have him advise with Pollard and myself and to do what he could to assist in putting the machine in a condition to do such work as would be satisfactory to Allen & Ginter, and also to give Pollard any ideas he could about operating the machine.

116 4 Q. When Pollard first went to Allen & Ginter's was there any serious trouble with any part of the machine other than the tube?

A. There was not, though the machine could not be said to have been in first-class order.

5 Q. There has been filed as an exhibit with your cross-examination a letter of yours to Pollard, dated July 12, 1883, in which certain irregularities were spoken of. State what was the cause of those irregularities, if you can.

A. The irregularities therein referred to as the irregularity of the work meant the irregular filling of the cigarettes, some being too hard and some being too soft. This was produced by one of four causes, one of which is irregular feeding by the feeders, another is the slipping of the feed-belt, another is the want of a proper adjustment of the pin rollers and guards, and the other is the being of the wheel that draws the tape belt through the tube too large, which will cause the cigarette to move faster than the tobacco is supplied and cause the cigarettes to have soft places. In the letter referred to I seem to have been of the opinion, from what Mr. Pollard had said, that the irregularity was occasioned by the slipping of the last feed-belt.

6 Q. Was the application for the patent on the tube now used, which application was made by yourself, pressed; if not, why not?

A. It was not. Some objection was made to the form of the specifications—in what particular I do not now remember—and in the meantime Mr. Pollard having executed the contract dated the 27th of December, 1883, and I fearing no further trouble in the matter, paid no further attention to the application.

7 Q. Did you ever have any conversation with Mr. Pollard about the change involved in your application before the application was made?

A. I had not.

8 Q. Had Mr. Pollard ever made or described to you any such a tube as described in your application?

A. He had not. As before stated, and as shown by Mr. Pollard's letter, he first made a tube of this kind about the 1st of December, 1883.

9 Q. Did you ever have a model of the tube set out in your application made?

A. I did not. I had the drawings made in Washington city from the original Bonsack tube. I explained to the draftsman the differences I wanted made in the drawings between the original Bonsack tube and the tube as I desired patented. All I claimed was a tube with two straight, open slots, the left one extending to a point even with the abutment, but on the opposite side of the tube.

10 Q. What suggested these changes to you?

A. The trouble of constructing of Pollard's first tube and the trouble of the tobacco stems now and then stopping the gro-ves, and the fact that the paper and belt seem- to run very well along the open *sapec* in the tubes we had theretofore used impressed me with the idea that a tube might be constructed with open slots.

11 Q. What knowledge did Gotendorf & Co. have of the tubes made by them for the machines beyond such information as was given them by Pollard?

A. In the original contract with Gotendorf & Co. there was, I think, nothing said as to kind of tubes. They were to build the machines in all respects like the machine in Brussels, and the original Bonsack tube was on that machine. Mr. Pollard had the tube changed from the original Bonsack tube to tubes like the tubes X X X.

And further this deponent saith not.

D. B. STROUSE.

The foregoing deposition of D. B. Strouse was taken, sworn to, and subscribed to before me at the time and place and under the circumstances herein mentioned.

Given under my hand this the 29th December, 1887.

JAMES W. PALMER, *Com'r.*

Fee, $22.37, paid by Bonsack Machine Co.

117 EXHIBITS FILED WITH D. B. STROUSE'S DEPOSITION.

Agreement.

This agreement, made this 27th day of December, 1883, between the Bonsack Machine Company and E. T. Pollard, witnesseth:

That the said company having employed the said Pollard to set up, run, and improve the Bonsack cigarette machine in the United States and abroad, it is agre-d that in consideration of the said employment the said Pollard shall do all he can, in every possible way, to advance the interest of the said company, and that any improvements made by him on the said machine shall be wholly for the benefit of said company, and that he will do nothing, directly or indirectly, which may at any time come in conflict in any way whatsoever with the interest of the said company or their assignees; and in consideration of the premises it is agreed that the said company shall pay to the said Pollard seventy-five dollar*d* per month, and

when he is sent out of the United States his actual railroad and ocean fares and his board bills and fifty dollars per month extra.

Witness the following signatures and seals this day and year first above written.

BONSACK MACHINE COMPANY. [SEAL.]
E. T. POLLARD. [SEAL.]

Witnesses:
E. SCHAEFER.
P. A. KRISE.

Pollard's Account A.

The Bonsack Machine Company to E. T. Pollard, Dr.

1883.			
June	26.	To railroad fare	$4 25
	30.	Paid for tools and material for tube- and shop rent	3 45
July	4.	Sheet brass	40
		Shop-room to work and material for making tubes	1 30
July	5.	Express on steel belts	80
"	"	Stamps, paper, and postal cards	1 00
"	6.	Pay for Aust racken	15
"	13.	Stamps	15
"	20.	One file for sharp-ing, raised	40
"	24.	Two files to use on tube	45
"	"	Sheet brass	40
"	"	Sorder	15
"	25.	Tape for tube-letting	1 00
"	"	Sheet *silum* for tube	1 50
"	"	Stamps	30
		Spool silk	10
	28.	Talbot & Son for pulleys	7 00
		Anoyage on same	25
	30.	Miller & Haws for pulleys	2 25
		To 5 days' services in June	12 50
		To July services, one month	75 00
			$112 00
July	19.	By cash of P. A. Krise, tr.	25 00
			$87 00

LYNCHBURG, VA., *July 19th*, 1883.

The banking-house of P. A. Krise, pay to E. T. Pollard or order twenty-five dollars on account.

P. A. KRISE,
Tres. B. M. Co.

(Endorsed: E. T. Pollard.) Received of P. A. Krise, tres., twenty-five dollars on account of services. July 19th, 1883. E. T. Pollard.

LYNCHBURG, VA., *August 8th*, 1883.

The banking-house of P. A. Krise, pay to E. T. Pollard or order eighty-seven dollars, as per a/c. rendered for services to August 1st, '83, and sundry expenses, &c.

$87.00. P. A. KRISE, *Treas.*

Endorsed: E. T. Pollard, Allen & Ginter.

118 Received of P. A. Krise, treasurer of Bonsack Machine Co., eighty-seven dollars in full for my services to August 1st, 1883, and for sundry am't paid out by me as per bill rendered.

E. T. POLLARD.

Richmond, Va., August 8th, '83.

RICHMOND, VA., *July 30th*, 1883.

Mr. Pollard bought of Miller & Haws.

1 pulley $2 25

Rec'd paym't,

G. P. HAWS.
M.

SHOCKHOE MACHINE WORKS,
RICHMOND, VA, *July 28th*, 1883.

Bonsack Machine Co. bought of Talbot & Sons.

1 pulley 8 x 4	$3 00	
1 do. 12 x 4	4 00	
		$7 00

Rec'd paym't,

TALBOT & SONS.
M. S.

Pollard's Account B.

The Bonsack Machine Co. to E. T. Pollard, Dr.

For one month's services, August, 1883, $75.00 (seventy-five dollars).

Aug. 15,	money paid out, paper and envelopes	$0 25
10,	to stamps	75
10,	oil-can	75
18,	tape for belting	1 65
23,	paper and envelopes	35
23,	hetting stone for sord-ring	1 00
26,	4 lb. sheet brass	2 00
"	assiad & alkenhal	25
		7 00
		75 00
		$82 00

Approved.
D. B. STROUSE, *Pres.*

Mr. P. A. Krise.

SIR: You will please pay to Mrs. E. T. Pollard the balance due me on last month, $7.00 (seven dollars), and oblige,

Yours, E. T. POLLARD.

September 15, 1883.

Received of P. A. Krise, treasurer of Bonsack Machine Co., seventy-five dollars for services month of August, 1883.

E. T. POLLARD.

Richmond, Sept. 3rd, 1883.

D. B. Strouse Letters.

"EXHIBIT S. No. 1."

BANKING-HOUSE OF P. H. KRISE,
LYNCHBURG, VA., 12 *July*, 1883.

Mr. Pollard.

DEAR S'R: I missed the train yesterday, and only start to 119 Canada to-day. I have seen yours of the 10th to Mr. Krise.

The irregularity of the work is caused by some slipping, and I have no doubt it is the loat belt. I have thought it might come from the tobacco ledging in the hopper over the steel belts, but that would produce greater irregularities than you have. I never saw the old machine or the Brussels machine make any irregularities at all, and hence I know it must be from slipping of the belt. If you observe it very carefully you may detect it.

We say go ahead do what is necessary to make good work, and do as much as you possibly can. You are now making the reputation of our machine be it good or bad. I am confident that the irregularities is in the lost belt slipping. See well to that. I am glad you are getting on so well.

Yours truly, D. B. STROUSE.

EXHIBIT K. No. 2.

BONSACK MACHINE CO.,
OFFICE OF SECRETARY AND TREASURER,
LYNCHBURG, VA., *July* 13*th*, 1883.

E. T. Pollard, Richmond:

Yours of the 11th rec'd. Mr. Strouse was here yesterday, and read your letter and wrote to you. He agrees with me that you must do what is required to be done to machine, so the machine will do perfect work. Have such pulleys made as you want to do best work and that is permanent; if you are not well enough acquainted with the party who can do the work—iron that you can't—get Mr. Pope to assist you, but if necessary I will come down and help you in any way I can, but I don't see what I could do. Mr. Strouse will be gone ten days. You understand what we want—to

put machine in perfect order and to do very best work, and for awhile prefer quality of work to quantity.

Yours, P. A. KRISE.

Of course by quality of work I mean cigarettes made.

EXHIBIT S. No. 3.

BONSACK MACHINE CO.,
OFFICE OF SECRETARY AND TREASURER,
LYNCHBURG, VA., 19 *July*, 1883.

Mr. Pollard:

I have been talking to Mr. Thurman about the change you propose making in the belt and rollers. I am not sure that this will at all benefit the matter; I doubt it. Have you got the guard in front of the roller close up against the roller pins at the bottom, and does the fast running roller run close up to the guards, so as to catch the tobacco while it is held by the guards? Please look well to these points. I suggest these because the machine in Brussles made exactly like yours did not make irregular work, and therefore I take it that there is something wrong in the working of the machine. However, I shall be willing for you to make changes which you certainly regard as necessary. I shall not be satisfied until the machine in Richmond makes work which A. & G. say is better than hand-made work, and the machine makes 85,000 cigarettes per day average. I know that it will do all this when in proper order and properly run. Don't fail to keep me posted.

120 EXHIBIT S. No. 4.

D. B. Strouse, attorney-at-law.

SALEM, VA., 23*rd July*, 1883.

Mr. Pollard.

DEAR SIR: Your letter is received. If the work is not regular enough and you are decidedly of the opinion that the alterations you propose will benefit the machine I say make them. If you do, however, I hope you will try to stop the machine for as short a time as possible. Two things are absolutely necessary to your thorough success in this country—the first is that the machine does good work; that the second is that it certainly makes an average of no less than 75,000 a day. Please answer the following question: 1st, is Mr. Hughes with you, and how is he getting along? Does he take a deep interest in the machine, and can and will he run it properly and fully when you leave? 2nd, what number of cigarettes do you average per day? 3rd, how in general terms is Pope pleased with the work? 4th, has Pope said anything about wanting more machines? 5th, how long will it be until you think you can safely leave the machine in the hands of Mr. Hughes, if at all?

Please read this letter while writing to me so as to answer each question fully.

Yours truly, D. B. STROUSE.

Pollard's Letter No. 1.

RICHMOND, VA., *August 14th.*

Mr. Krise.

SIR: I received your card. It was 362,000 cigarettes packed last week; that is what the packers say were packed. I made about 70,000 yesterday and about 75,000 to-day.

Mr. Gibbs is getting along very well. I think by the time that I get the work done on the machine that he will be all rite. After I get him so as I can leave him I will make him another tube that will work better than the one we are working now. I think that I will have all the work done and ready to leave here in two weeks. I will keep you posted how I am getting along with the work as soon as I can get it. I have got Ettengem & Edmonds doing the work.

Yours truly, E. T. POLLARD.

Pollard's Letter No. 2.

RICHMOND, VA., *August 17th*, 1883.

Mr. Strouse.

SIR: I received your letter this evening. You did not seem to be pleased with the week's work last week; that is the largest week's work that they ever give me creted for since I have been hear. I go to the factory by 6½ o'clock and stay until after 6 ever day, and I have stopped but verry littel. You say that the machine is running fast enough, but I can't get any more work out of it than I have been getting unless I run the machine faster. I make it doo all that it will. I think that I have made about 75,000 every day this week until to-day I made about 40,000. My tube got out of order and I had to work on it to-day. It is wearing out in some places. I will put a roller in the throught of all I make hereafter. It will make them a great deal better. This has gotten so that it 121 cuts the belts. Mr. Gibbs is getting on verry well. He can run the machine now, but I don't think he understands anoufe about it yet to fix it when it gets out of order, but he will by the time I get the work done on the machine that I am going to do. He is well pleased and am anxious to learn all that he can about it. I got some lining belting to-night. I think they will do betten than the ones that I have been using. I will commence my tube Monday. I am doing very pretty work now. Mr. Pope never finds any fault of my work now. I put in a thicker presser roller, and put springs under it, and it does a great deal better. It don't choke in the throut of the tube now.

Respectfully yours, E. T. POLLARD.

P. S.—I will write you to-morrow night and send you the amount packed this week.

Pollard's Letter No. 3.

RICHMOND, VA., *August 21st*, 1883.

Mr. Krise.

SIR: I made about the same amount of cigarettes to-day that I made yesterday—about 75,000—but they did not pack them after me as they did yesterday, so I can't tell exactly how many I made. Gibbs is getting on very well. I am making a new tube; the old one is about worned out. I will send you a sample of the cigarettes as soon as I get the new tube made. How did you like the last sample I sent, or did you ever get them?

Respectfully yours, E. T. POLLARD.

Pollard's Letter No. 4.

RICHMOND, VA., *August 25th*, 1883.

Mr. Krise.

SIR: They packed 342,500 cigarettes this week. We have been working verry trashey tobacco this week, but I got my new tube done and I can work trash or anything with it. I want to see you or some of the company in regard to the tube. I make cigarettes in the tube instead of making under presser roller, and it is the only way that cigarettes can be made rite. It makes the cigarettes round and takes all the rinkle out of the paper. They are round, and the paper fits the tobacco smooth, like hand-made work. The tobacco is put in the tube loose and pressed in the tube round and smooth, and the paper put on tight.

Respectfully yours, E. T. POLLARD.

Pollard's Letter No. 5.

RICHMOND, VA., *August 31st*, 1883.

Mr. Strouse.

SIR: I have not gotten the machine rite yet, but I think I will get it rite by Tuesday. I am making the prettis cigarettes you ever saw. My tube is all that I expected it to be. I think that they may take two more machines, they are so well pleased with the work. I will send you a sample of the work in a day or two. I will give you the amount of work packed this week: August 27, 46,500; August 28, 75,000; August 29, 75,000; August 30, 70,000; August 31, 84,000.

122 I don't make but very little trash now.

Respectfully yours, E. T. POLLARD.

Mr. Gibbs is getting along all rite.

Pollard's Letter No. 6.

RICHMOND, VA., *July 7th*, 1883.

Mr. Krise:

SIR: I cannot do a very big day's work to-day. I have been working on the machine to-day. It makes some of the cigarettes hard and some of them are soft. Mr. Pope says that he had some of the first that was made sent back to-day. I have gotten it to making them a great deal better than it was doing when Mr. Strouse left. Where is Mr. Strous? He promast to let me know where he was. I can fix the machine, but I would like to have the advice of Mr. Strouse or some of the company. Mr. Strouse knows all about the trouble we had, and if I knew where he were I could write to him and get his advice about the changes that I want to make. I made 50 or 60 thousand, but I was not running more than four or five hours. It will make 75 thousand easy ever day, but I think that they ought to be all right before we make too many. I am making a good cigarette, but I think that it ought to make a better one than we are making. It made the best work to-day that it has ever made since I have been here, but they might be better. Please let me know where Mr. Strouse is so as I can write to him about the changes that I want to make.

Respectfully yours, E. T. POLLARD.

Pollard's Letter No. 7.

RICHMOND, VA., *July 21st*, 1883.

Mr. Strouse.

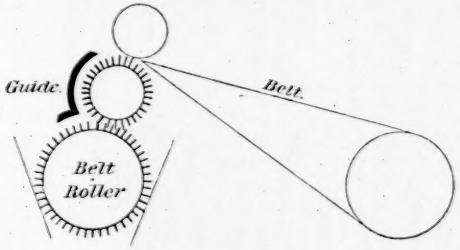
SIR: I received your letter yesterday in regard to changes to machine; they will have to be made before the machine ever work rite.

I beleive that this machine is making just as good work as any machine has ever made. A. & G. says that it is the best work that they have seen—that is, Mr. Pope says so—and you know that he is the one that we have got to please with the work. I know where the trouble is in the machine, but I don't intend to make any changes unless you approve of it; that is why I have not stopped and made the changes at once. I will make a sketch of the roller in the back of this sheet for you to look at. I made about 40,000 cigarettes to-day and they stopped at one o'clock. Let me know what you think about the changes in your next letter.

Yours respectfully, E. T. POLLARD.

You will see that there is about three inch space from guide to the bottom of the spikes, and that there is nothing to keep the tobacco from being junked out from the bottom of the spikes up to the guide, and the only way that I can see to stop that is to only have the spike just halft length that they are, and then it will only have half the space and half of the tobacco out of the guide. Now, there is the trouble. Now, it is for you to say what shall be done;

you can see from the guide to the center of the roller how much space there is.



I think that you can understand by this sketch.

123 You can see from this how fast the tobacco can stick in the top roller before the bottom roller spikes the bodey of the top roller, the plate can only be set to the end of the spikes, if you will think about it.

Pollard's Letter No. 8.

RICHMOND, VA., *July 6th*, 1883.

Mr. Krise.

SIR: I received your letter to-day and also the tube an mandril. Mr. Pope am satisfied with the cigarettes; he says that they are all right now. I am making a better cigarette than when Mr. Strouse left here. Yesterday I filled 32 boxes and 15 to-day. The machine stoped at 1 o'clock to-day. Mr. Strouse says that the boxes will hold 27,000 cigarettes each; that would make 86,400 for Friday and 40,300 to-day. They are all well pleased with the work now. I think that they will put a man in to learn to run the machine Monday.

Respectfully yours, E. T. POLLARD.

Pollard's Letter No. 9.

RICHMOND, VA., *Sept. 6th*, 1883.

Mr. Krise.

SIR: I forgot the reseat when I wrote to you. I send it in this letter. They packed 85,000 cigarettes yesterday and 82,000 to-day. Mr. Strouse was here yesterday and I had gone to see a brother of mine that was sick, and did not get to see him. He left before I got back last night. I very sorry he left before I saw him. I was very anxious to see him. Did Mr. Strouse send you my account for August, you did not say anything about it.

Yours respectfully, E. T. POLLARD.

I want to come to Lynchburg Saturday; let me know if I can come. I want to see you on some business. Mr. Gibbs says that Mr. Strouse did not like my being away from here yesterday. Write to me as soon as you get this and let me know if I can come up. I don't want to be out of place any more.

Pollard's Letter No. 10.

RICHMOND, VA., *December 1st*, 1883.

Mr. Strouse.

SIR: I have had good deal of trouble since I came down to get cigarettes rite, but I wouldn't leave them till I got everything all rite. I want to get three tubes to work all rite so as to leave two here and send you one. I heard that there was something said about the cigarettes not being exactly round, so I have made a tube to make the round, and I had to change the steel belting to make the rol round. I will explain when I see you. I got the tube done to-night and will try it Monday, and then I will go to Lynchburg. I will write to you as soon as I get to Lyn. and tell you all about how the new tube works and send you a sample of the work.

Respectfully, E. T. POLLARD.

124 *Pollard's Letter No.* 11.

PARIS, FRANCE, *March 25th*, 1884.

Mr. Krise.

SIR: I received your letter, with the check enclosed for 750 franks, and Mr. Gotendorf & Co. received one from you, saying that you were surprised that the machine had been shipped to Phil., instead of N. Y. The only orders that I have ever received or seen was to ship to the United States. I wrote to Mr. Strouse several time about shipping the machine, and he never said one word about shipping the machine, so I shipped them by the cheepest rout to the U. S. If you all had any purticular way you wanted them shipped you ought to have said so. Wate until the last machine has been shipped two weeks and then say how they should have been shipped. It is too late after they have been shipped to give orders how to ship. I wrote to Mr. Strouse the next day after I got here and told him what time the machines would be finished. They have been one machine shipped to Bristol, 3 to Cuba, 7 new and 1 old to Phil., U. S., and have two others ready to ship. One I am having some changes made on, having new parting arrangement put on. I hope you will not have any trouble about getting the machines, but I must say that I think it is very strange that there was nothing said about how the machines should be shipped until the last machine had been shipped. I think theat the business is done very funny, anyway. I was told by Mr. Strouse that Mr. Jenacker, the company's agent, would want some machines set up and started over here, but I have never heard a word from him, but I have hadd all that I could do to get the changes made on the machine. I wrote you a letter last week and sent your a letter from Wills & Co., Bristol. I have not heard from them since then. I hope that Mr. Strouse will be on soon. I am very anxious to get through here and go back home. I have not heard from Mr. Strouse for some time. I hope he did not have any trouble in getting his machine.

The last I heard from him had not gotten it. I have gotten three or four letters saying that the printing machine was coming, but I have never seen anything of it yet.

Respectfully yours, E. T. POLLARD.

Pollard's Letter No. 12.

RICHMOND, VA., *September 24th*, 1883.

Mr. Strouse.

SIR: I send you the tube by express to-day. I reckon you think I kept it a long time. I wanted to try it before I sent it to you, and I got my hand cut on the shifter so I could not use it for 3 or 4 days. The changes works all right that I made in the machine. I jest encrest the space in the last belt and roller one-half and let all the rest of the machine run the same as it did before, and filled the roller one ½ the length of the teeht, the last feed roller, so as it would just take one half as much tobacco as it did before, and it makes cigarettes all right. I am making a machin to stamp lettel beutee on every cigarettes. I will have it done this week. I think I will stamp the letters in the paper before the cigarettes is made. I will send you some of the cigarettes as soon as I get it work. I enclose you the bill for the work I had done. It is the biggest bill I ever saw. I taken it back one and got him to take off about $15 dollars. The bill was $107.65, and he taken off about to what you see it. I will never get them to do any more work for me or the company either. I got some — and patched the belt and it is all right now, just as good as a new one would bee.

Respectfully yours, E. T. POLLARD.

125 Depositions of J. McH. Peters and J. H. Flood taken by consent of parties before me, A. R. Long, a notary public in and for the city of Lynchburg, in the State of Virginia, on the 4th day of February, 1888, at the law office of R. G. H. Kean, 914 Main street, in the said city, to be read as evidence in behalf of the defendant in a suit in chancery now pending in the U. S. circuit court for the western district of Va., in which E. T. Pollard is the plaintiff and the Bonsack Machine Company the defendant:

Present: D. B. Strouse, of counsel for defendant, and R. G. H. Kean, of counsel for plaintiff.

J. McH. PETERS, being duly sworn, deposes as follows:

1st question. What is your name, age, residence, and occupation?

Ans. My name is J. McH. Peters; 45 years of age; residence, Lynchburg, Virginia. I am a manufacturer of tobacco, as one of the firm of Peters & Flood.

2nd question. Do you know E. T. Pollard, the complainant, in this cause; if so, how long have you known him?

Ans. Yes; I know him, and have known him for twelve years or more.

3rd question. Did E. T. Pollard ever have any conversation with you relative to the Bonsack Machine Company; if so, when and what was said to you by him?

Ans. Yes; before he was employed by the Bonsack Machine Company. I think it was in the year 1883. He met me on the street and wanted me to assist him through talking with Maj. Flood to get him a position with the Bonsack Machine Company, and he stated to me that he could make some changes in the machine that he thought would be of some benefit to the company. The reason he came to me was that I had known him for a long time and known him to be a good mechanic. In that talk I promised him that I would do what I could for him through Maj. Flood, which I did.

4th question. Did E. T. Pollard or did he not speak to you afterwards on this subject?

Ans. Yes; frequently. I don't know that I could state the times.

5th question. Did he or did he not, to your knowledge, confer with Maj. Flood; and, if so, where?

Ans. He did in our office. He came to our office, and, after talking with me, and conferred with Maj. Flood and myself on the subject of the Bonsack machines and employment by the company.

6th question. Are you or not a stockholder in the Bonsack Machine Company?

Ans. I am not. I was at that time.

And further this deponent saith not.

J. McH. PETERS.

J. H. FLOOD, a witness of lawful age, being first duly sworn, deposes as follows:

By counsel for defendant:

1st question. What is your name, age, residence, and occupation?

Ans. John H. Flood; age, 57; I am in the tobacco business; residence, Lynchburg.

126 2d question. Do you know E. T. Pollard, the complainant in this cause; and, if so, how long have you known him?

Ans. I do, and have known him about eight years. The first I ever saw of him was in fixing up Peters' factory about eight years ago.

3rd question. Did E. T. Pollard or did he not ever have any conversation with you relative to his being employed by the Bonsack Machine Company? If so, when and where was such conversation and what was said by E. T. Pollard?

Ans. He did, at the office of Peters and Flood, some three or four years ago. Pollard had had a talk with Peters about getting employment with the Bonsack Machine Company, and came to talk with me to get me to use my influence to secure him the position. In that conversation he said that he understood the Bonsack machine pretty thoroughly, and that he thought that the improvements that he could make upon it would be worth more to the com-

pany than his salary and that he would make very material improvements on it if they would give him the position.

4th question. Did you or not have any conversation with any of the officers of the Bonsack Machine Company with reference to the employment of E. T. Pollard by the company; and, if so, with whom did you have the conversation and what position, if any, did you take as to the employment of E. T. Pollard by the company?

Ans. I did; first with Mr. Krise and afterwards with Mr. Strouse and afterwards with the two in conjunction, I think. I took the position that they ought employ him, and urged it upon the grounds that he was a very skillful and ingenious mechanic, and I believed that he would make some valuable improvements in the machine.

5th question. Were you or not at that time a stockholder in the Bonsack Machine Company?

Ans. I was.

6th question. Have you any interest in the Bonsack Machine Company now?

Ans. I have none. I have sold my stock since that time.

7th question. In what was E. T. Pollard engaged immediately prior to his employment by the Bonsack Machine Company?

Ans. Really I don't know. He was not in any business at that time, as he told me himself, and I learned from others.

And further this deponent saith not.

JOHN H. FLOOD.

STATE OF VIRGINIA, *City of Lynchburg,* } *To wit:*

I, A. R. Long, a notary public in and for the city aforesaid, do hereby certify that the foregoing depositions of J. McH. Peters and John H. Flood were duly taken, sworn to, and subscribed before me in my said city.

Given under my hand this 6th day of February, 1888.

A. R. LONG,
Notary Public.

Notary's fee, $2.00.

127 *Deposition of James N. Gotendorf.*

MAY 7, 1887.

NOTE BY THE CLERK.—The interrogatories required to be propounded to this witness on behalf of both plaintiff and defendant are omitted in making this record, the same being fully and accurately propounded and copied in the deposition itself.

The *dedimus potestatem* or commission authorizing the taking of this deposition, and duly annexed thereto as required, is likewise omitted as not essential.

In the United States Circuit Court for the Western District of Virginia.

E. T. POLLARD, Plaintiff,
vs.
THE BONSACK CIGARETTE MACHINE COMPANY, Defendant.

The deposition of James N. Gotendorf, taken before me, J. L. Rathbone, consul general of the United States of America at Paris, France, pursuant to notice hereto annexed, at the consulate general of the United States at Paris, France, on the 7th day of May, 1889, between the hours 6 a. m. and 6 p. m., to be read as evidence on behalf of the plaintiff in a certain cause now pending in the circuit court of the United States for the western district of Virginia, at Lynchburg, in chancery, wherein E. T. Pollard is plaintiff and The Bonsack Cigarette Machine Company is defendant.

JAMES N. GOTENDORF (the witness), being duly sworn on the Holy Evangelist of Almighty God, deposeth and saith as follows:

1 question. What is your name, age, residence, and occupation?

1 answer. My name is James N. Gotendorf; my age is 37 years & upward; my place of business is 11 Rue Bergere, Paris, and my occupation is that of commission merchant.

2 question. Are you acquainted with Mr. E. T. Pollard, of Richmond, Virginia, United States of America, the plaintiff in the above-named suit?

2 answer. Yes.

3 question. Are you acquainted with Mr. D. B. Strouse, the president of The Bonsack Cigarette Machine Company, the defendant in said suit?

3 Ans. Yes.

4 Qu. Are you acquainted with the firm of Messrs. Gotendorf and Co., of Paris, France?

4 Ans. Yes.

5 Qu. Who composed said firm of Messrs. Gotendorf & Company in 1884?

5 Ans. Silvanus Gotendorf and two silent partners.

6 Qu. What relation, if any, are you to Mr. Samuel Gotendorf of said firm of Gotendorf and Company?

6 Ans. I am brother to Silvanus Gotendorf; the name of Samuel is an error.

7 Qu. Were you engaged with said firm of Gotendorf & Company in 1884; if so, in what capacity?

7 Ans. Yes; I was in their employ as head warehouseman.

128 8 Qu. Did you ever see, in the year 1884, Mr. E. T. Pollard at the place of business or factory of said firm of Gotendorf and Company?

8 Ans. Yes.

9 Qu. When did you first see Mr. E. T. Pollard at the place of business or factory of said firm of Gotendorf and Company?

9 Ans. In January, 1884.

10 Qu. When did you last see Mr. E. T. Pollard at the place of business or the factory of said firm of Gotendorf and Company?

10 Ans. As far as I can remember, in November, 1884.

11 Qu. Please state as accurately as you can during what month in the year 1884 you saw Mr. E. T. Pollard at said place of business or said said factory of said firm of Gotendorf and Company.

11 Ans. At various times. I can't state exactly.

12 Qu. Did you ever see Mr. D. B. Strouse at the place of business or the factory of said firm of Gotendorf & Company in 1884?

12 Ans. Yes.

13 Qu. When did you first see Mr. D. B. Strouse there in 1884?

13 Ans. In May, 1884.

14 Qu. When did you last see Mr. D. B. Strouse there in 1884?

14 Ans. As far as I can remember, in October, 1884.

15 Qu. Please state as accurately as you can during what months you saw Mr. D. B. Strouse there at said factory or place of business of Gotendorf & Company in 1884.

15 Ans. At various times. I can't state exactly.

16 Qu. Where was the factory or place of business of Gotendorf & Company in 1884?

16 Ans. At 166 *Quai Jemmasses*, in Paris.

17 Qu. How long was E. T. Pollard in or near Paris in 1884?

17 Ans. From eight to nine months, not counting about two months that he was absent in Italy.

18 Qu. When did E. T. Pollard leave for Italy, and when did he return to Paris from Italy in 1884?

18 Ans. As far as I can remember and by reference to letters, he left the end of May and returned in July of 1884.

19 Qu. Are you acquainted with the cigarette machine known as the Bonsack cigarette machine?

19 Ans. I am.

20 Qu. Did you ever see any Bonsack cigarette machines made in the factory of Gotendorf & Co. in 1883 and 1884?

20 Ans. Yes.

21 Qu. When were those machines first made by Messrs. Gotendorf & Company?

21 Ans. First in 1883.

22 Qu. Who superintended the making of those machines at said factory in 1883 or 1884?

22 Ans. In 1883, James Bonsack, the inventor; in 1884, E. J. Pollard.

23 Qu. Did you ever examine said Bonsack cigarette machine?

23 Ans. Yes; superficially.

24 Qu. Are you acquainted with that part of said machine known as the tube, sometimes called the compressive tube?

24 Ans. Yes; superficially.

25 Qu. Did those machines have the same kind of tube before Mr. Pollard's arrival in Paris in 1884 as they had after his arrival there?

25 Ans. No.

26 Q. State, if you can, wherein was the difference in said tubes after his arrival in Paris in 1884.

26 Ans. In so far as I can remember, he improved the tube considerably by making open slots alongside of the tongue.

129 27 Qu. By whom were those tubes made in 1884 in Paris?

27 Ans. By Gotendorf & Co.

28 Qu. Were any tubes made for said cigarette machines before Mr. D. B. Strouse's arrival in Paris, in the spring of 1884, like those made in the summer or autumn of 1884?

28 Ans. No.

29 Qu. When were the tubes, like those made in the summer or autumn of 1884, first made at the factory of Gotendorf & Company?

29 Ans. After Mr. Strouse's arrival, to the best of my knowledge.

30 Qu. Who ordered the tubes after Mr. D. B. Strouse's arrival in Paris in the spring of 1884?

30 Ans. He did himself.

31 Qu. Did you ever hear Mr. E. T. Pollard order either of the partners of the firm of Gotendorf & Co., or any of their employees, to make those tubes?

31 Ans. No.

32 Qu. Did you ever hear Mr. E. T. Pollard say anything to any one in the presence of Mr. Samuel Gotendorf or of his, Mr. Gotendorf's partner, Mr. Goodwin, or say anything to Mr. Samuel Gotendorf or to Mr. Goodwin about making these tubes?

32 Ans. No.

33 Qu. Do you know of any of those tubes being shipped to the United States of America in 1884 or afterwards?

33 Ans. Yes; in so far as I can remember, after Mr. Strouse's arrival.

34 Qu. By whom were they shipped to the United States of America and in what month or months in 1884?

34 Ans. By Gotendorf & Co. upon Mr. Strous's order. I do not remember the exact dates.

35 Qu. By whom were they ordered to be shipped to the said United States?

35 Ans. By Mr. Strouse.

36 Qu. Did you ever hear Mr. E. T. Pollard give any such order to ship them to the United States of America, or did you ever hear him speak to Mr. Samuel Gotendorf or to Mr. Goodwin about the shipment of those tubes to the United States of America?

36 Ans. No.

37 Qu. Do you know or can you set forth any other matter or thing which may be a benefit or advantage to the parties at issue in this cause or either of them or that may be material to the subject of this your examination or the matters in question in this cause? If yes, set forth the same fully and at large in your answer.

37 Ans. Instead of the name Samuel Gotendorf it should be Silvanus Gotendorf. In addition to that correction, I can only state

that the before-mentioned change in the tubes made by Mr. Pollard was considered a very important improvement by both Mr. Strouse and Messrs. Gotendorf & Company.

Questions by D. B. STROUSE, att'y for defendant:

1 Qu. Were you not in 1884 engaged in handling cigarette paper & was not very little of your time spent at the shops of Gotendorf & Cie.?

1 Ans. No; all my time was spent there.

2 Qu. Were any one's duties while at the shops of Gotendorf & Cie. wholly office work and not in the workshops?

2 Ans. Not at all office work. I was exclusively in the warehouse, through which all the machines passed before being shipped.

130 3 Qu. Did you, in fact, have any business in the shops or know anything about what the workmen were doing?

3 Ans. Yes, I did, being in the warehouse the entire time.

4 Qu. Do you not know that D. B. Strouse and E. T. Pollard left for Italy immediately after Mr. Strouse's arrival in Paris, and do you not know that Mr. Pollard had had the tubes with two open slots made before Mr. Strouse arrived in Paris, and that they took several of those tubes with them to Italy?

4 Ans. He left several weeks after Mr. Strouse's arrival; I neither know that these tubes were made before Mr. Strouse's arrival nor that they took any of them to Italy.

5 Qu. Did not Mr. Pollard have some of those tubes made of steel?

5 Ans. Not to my knowledge.

6 Qu. Were you not present when Mr. Strouse first came to the shops of Messrs. Gotendorf & Co., after his arrival in Paris, and did not Mr. Pollard then show tubes such as had two open slots, one on each side of the tongue, to Mr. Strouse, and was not one or more of those tubes made of steel, and did not Mr. Strouse tell Mr. Pollard after examining the tubes in your presence that he was very glad that he had succeeded in having the tubes made of steel?

6 Ans. I was not present at any such interview.

7 Qu. Was not Mr. Pollard in Paris for months in 1884 before Mr. Strouse arrived, and had he not superintended the building of the Bonsack cigarette machines—completed some of them—and had he not already shipped one of the machines to Italy?

7 Ans. Yes; for several months. Yes; he superintended the building of the Bonsack machine. I cannot remember whether he had either completed or shipped any of them.

8 Qu. Did not Mr. Pollard make several alterations in the said machines, and was not their construction wholly under his direction?

8 Ans. Yes; he did make alterations on the machine and they were constructed under Pollard's direction.

9 Qu. Did you ever know Mr. Strouse to have anything to do with the construction of machines or any part of them?

9 Ans. I do not remember.

10 Qu. Do you not know the fact that the tubes made while Mr. Pollard was in Paris were all made under his directions, and that none of them were made under the directions of Mr. Strouse?

10 Ans. Yes; they were all made under Mr. Pollard's direction and Strouse's orders.

11 Qu. Do you remember that Mr. Pollard deserted Mr. Strouse in Paris, and that you did what you could to prevent Mr. Pollard's return to America?

11 Ans. He intended to desert him but did not, and considered himself as an employee of the Bonsack Machine Co. until the day he left.

12 Qu. Did you not tell Mr. Pollard that his leaving Mr. Strouse in Europe without any one to assist him was a shame, or words to that effect?

12 Ans. I told him that if he did leave him it would be a shame, or words to that effect.

13 Qu. Were you not, so far as you know, the first person to tell Mr. Strouse that Mr. Pollard intended to leave him, and did you not tell Mr. Strouse that Mr. Ginter, of Richmond, Va., had offered Mr. Pollard a situation?

13 Ans. As far as I know, I was the first person to tell Mr. Strouse that Mr. Pollard intended to leave, but which eventually he did not do. Yes; I told Mr. Strouse that Mr. Ginter offered Mr. Pollard a situation after he left the services of the Bonsack Machine Company.

131 JAMES N. GOTENDORF.

REPUBLIC OF FRANCE, *City of Paris,* } ss:

I, J. L. Rathbone, consul general of the United States of America at Paris, France, do hereby certify that the foregoing depositions were duly taken, reduced to writing, and signed by the witness- respectively before me at the place and the time therein mentioned, pursuant to the annexed notice and commission.

In witness whereof I have hereunto set my hand and affixed my official seal this 13th day of May, 1889.

[Seal United States Consulate General, Paris.]

J. L. RATHBONE,
Consul General & Commissioner.

132 *The Deposition of H. W. Gibbs and Others.*

The deposition of H. W. Gibbs and others, taken before me, J. H. Webb Peploe, a notary public for the city of Richmond, in the State of Virginia, pursuant to notice hereto annexed, at the office of John Dunlop, in said city of Richmond, on the 10th day of March, 1890, between the hours of 9 a. m. and 6 p. m., to be read as evidence on behalf of E. T. Pollard in a certain suit in equity depending in the circuit court of the United States for the western district of Virginia, wherein E. T. Pollard is plaintiff and The Bonsack Cigarette Machine Company is defendant.

Present: John Dunlop, Esq., counsel for plaintiff; A. H. Burroughs and D. B. Strouse, counsel for defendant.

The taking of these depositions is, this 10th day of March, 1890, adjourned, by consent of all parties concerned, to Wednesday, March 12th, 1890, at the same time and place.

Office of John Dunlop, Esq., in the city of Richmond.

MARCH 12TH, 1890.

Present: John Dunlop, Esq., counsel for plaintiff; D. B. Strouse and A. H. Burroughs, counsel for defendant.

H. W. GIBBS, being dull sworn on the Holy Evangelist of Almighty God, deposeth and saith as follows:

1 question by counsel for plaintiff. What is your name and age?

Answer. H. W. Gibbs; age, 29.

2 Qu. Where do you live, and what is your occupation?

2 Ans. I live at 84 W. Main St., Richmond; I am superintendent of the Bonsack Cigarette Machine Co. at Allen & Ginter's.

3 Qu. How long have you been superintendent of those machines?

3 Ans. Ever since the 7th day of August, 1883.

4 Qu. Do you know Mr. E. T. Pollard?

4 Ans. Yes.

5 Qu. Was he engaged at Allen & Ginter's in August, 1883?

5 Ans. Yes.

6 Qu. What was his business there?

6 Ans. He was employed by the Bonsack Machine Co. at that time.

7 Qu. Did he make any change on the Bonsack machines at Allen & Ginter's in 1883 or not?

7 Ans. Yes; he did.

8 Qu. What changes did he make?

8 Ans. He changed a lot of the side gearing and set out the press roller.

9 Qu. Please look at this tube marked "X X," filed in this cause herewith (the witness is here shown the tube), and say whether or not this is the same kind of tube as is now used on the Bonsack machines at Allen & Ginter's.

9 Ans. This is the same tube.

10 Qu. When was that kind of tube first used in those machines? Was it in use when you first went there, in August, 1883?

10 Ans. It was not in use when I went there. Soon after
133 I went there a tube like this, except the slot through the bottom, was used. The slot is for the belt to go through.

11 Qu. What kind of cigarettes did the tube in use make when you first went there?

11 Ans. Very bad cigarettes; three-cornered shape.

12 Qu. Did you ever hear any complaints about them from Allen & Ginter?

12 Ans. I heard complaints from Mr. Pope very often.

13 Qu. When was the tube like this one just shown you, marked X X, first made?

13 Ans. It was made about the last of August, 1883.

14 Qu. By whome was the new tube made?

14 Ans. By Mr. E. T. Pollard.

15 Qu. Would you know that tube which Mr. Pollard made in the latter part of August, 1883, if you saw it?

15 Ans. Yes, sir; I would know it.

16 Qu. Look at this tube marked "Exhibit Tube," filed in this cause, and say whether or not this is the tube made by Mr. Pollard about the end of August, 1883.

16 Ans. Yes, sir; this is the tube.

17 Qu. How do you know this is the tube made by Mr. Pollard in August, 1883?

17 Ans. I know it by the back part being silver, and the front part was made of a piece of old piping from a gas fixture, I believe, and I wore that hole under the paste wheel myself.

18 Qu. What time in the day did Mr. Pollard make this tube?

18 Ans. He made it late in the evening, after five p. m. It kept both of us running the machine while we were there with the old tube on it.

19 Qu. Where did he get the material to make it?

19 Ans. He bought the most part of his materials down-town, on 16 St., at Bellenot's, all except the piece of the front—the barrel made of a piece of brass pipe found in the factory.

20 Qu. Please look at this mand-el, marked M and herewith filed, and say whose property it is.

20 Ans. It is the Bonsack Machine Co.'s property.

21 Qu. How long have they owned it?

21 Ans. It was at Allen & Ginter's when I went there, on August 9th, 1883. I was engaged on the 8th and came to Richmond on the 9th.

22 Qu. What did they use this mand-el for in 1883?

22 Ans. Mr. Pollard used it for straight-ning up and making the old tubes.

23 Qu. Describe, if you can, how he made the old tubes on this mandrel.

23 Ans. To make the tapering part of the tube the brass was

tacked in the slot in this — in the mandrel on the side & wrapped around, making the brass the same shape as the mandrel.

24 Qu. Were there any other mandrels belonging to the Bonsack Co. at that time on which tubes could be made?

24 Ans. There were no others except a straight rod to straighten up a tube.

25 Qu. Could Mr. Pollard make the tube marked "Exhibit Tube" on that mandrel?

Counsel for defendant excepts on the ground that it calls for an expression of opinion, and the witness is not shown to be a mechanical expert.

134 Ans. No; he could not.

26 Qu. Did you use any sheet brass on the Bonsack machine at Allen & Ginter's in 1883?

Ans. Yes; I did.

27 Qu. What did you use it for?

Ans. I used it for casing up the brush on the vibrating tube. There are several other places where it is used. I am just speaking of the ones I put it on. The hoppers are made of it & the drum is cased up with it. The machines now used have no brass hoppers.

28 Qu. Look at this tube marked Exhibit (X X X) and say whether you ever saw it before & and all that you know about it.

Ans. Yes, sir; this is the tube Pollard made for a model.

29 Qu. When did he make it?

Ans. I don't know the exact date; about the 1st Sept., in 1883.

30 Qu. Can this tube be used on the machine?

Ans. No, sir.

31 Qu. How many tubes did Mr. Pollard make like Exhibit Tube before he went to Paris, in January, 1884?

Ans. He only made one.

32 Qu. Were there any other Bonsack machines in Richmond in 1883 except those at Allen & Ginter's?

Ans. No; no others.

33 Qu. How many tubes like this Exhibit Tube had you at Allen & Ginter's at the time Mr. Pollard left for Europe, in January, 1884?

Ans. This was the only one of this kind.

34 Qu. Did you work that tube at Allen & Ginter's?

Ans. Yes; I did.

35 Qu. How long did you work it?

Ans. I don't exactly reccollect, but between 4 and 5 months—that is, altogether. I had it repaired during that time.

36 Qu. Who repaired it?

Ans. Mr. Thurmon, of Lynchburg.

37 Qu. How long does a tube generally last you?

Ans. The best from 2 to 3 months; sometimes a little longer; sometimes one don't last a week.

38 Qu. How did you manage, then, to keep that lasting so many months, and why did you use it so many months?

Ans. It was made out of thick material, and I had it repaired and repaired it myself.

39 Qu. Did you ever examine your collection of tubes at Allen & Ginter's in 1883–'4 to see if you did not have another tube made like that Exhibit Tube?

Ans. I knew that without examining.

40 Qu. Did you ever examine your collection at all?

Ans. I never examined to see if I had one like that. Mr. Strouse was there on one occasion & wanted to look at the tubes, & I took them down from where I had them hanging, & he looked over them.

41 Qu. Did he tell you why he looked over them?

Ans. No, sir; he did not tell me why he looked over them.

42 Qu. Do you know Mr. Pollard's brother, Lewis Pollard?

Ans. Yes, sir; very well.

43 Qu. Where was he living in September, 1883?

Ans. At West Point, Va.

44 Qu. How do you know this?

Ans. Mr. E. T. Pollard was there on one occasion, & the machine got out of order that day; I telegraphed to Lou Pollard for
135 him to come back.

45 Qu. Did he come back?

Ans. Yes; he came on first train.

46 Qu. When was that; what month and year?

Ans. Either the last of August or first of September.

47 Qu. Did he go to West Point afterwards to see his brother?

Ans. Yes; he told me he was going there again.

(Counsel for defendant excepts to above answer because it gives hearsay.)

48 Qu. When did Mr. Strouse examine those tubes?

Ans. After Mr. Pollard had gone to Europe. I do not recol-ect the date.

49 Qu. Did Mr. Pollard make any other tubes of any kind in 1883 up to the time he went to Europe?

Ans. He worked on the other tubes that were there when I went there, patching up and overhauling. This is the only working tube he made out and out after I came there.

50 Qu. Did you ever use any other tube on any machine than Exhibit Tube after Mr. Pollard made it?

Ans. I tried to use a French tube, but it would not work.

51 Qu. When did you first use any other tube than Exhibit Tube?

Ans. It was after this was worn out. Thurmon made the next after Pollard left for Europe.

52 Qu. It is in evidence that Mr. Pollard applied for his patent on the 14th Sept., 1883. Did you ever see Mr. D. B. Strouse, president, & Mr. Krise, treasurer, of Bonsack Co., in Richmand soon after that time?

Ans. Yes.

53 Qu. Did they visit Allen & Ginter's factory then?

Ans. Yes.

54 Qu. State what passed at that time so far as you remember between those two gentlemen and Mr. Pollard in your presence.

Ans. This was at Ford's hotel. Mr. Strouse & Krise came down to my boarding-house after me, at night, to go with them to Ford's hotel. I went with them, and Mr. Strouse drew up a contract for me to sign.

55 Qu. Where is that contract now?

Ans. I signed it and gave it to Mr. Strouse.

56 Qu. Did Mr. Pollard sign any such contract that you know of?

Ans. Not that I know of. Mr. Strouse told me to see Mr. Pollard and to try to persuade him to sign this contract.

(Counsel for def't excepts to so much of above answer as refers to what Mr. Strouse attempted to get the witness to do in the way of persuading Mr. Pollard to sign contract because not responsive to question; and, besides, it has not been shown what contract, if any, was on that occasion presented to Mr. Pollard.

Counsel for plaintiff replies that so far as above answer is not responsive to question may be exceptionable, but there is in evidence in this cause a contract in writing which Mr. Pollard testifies that Mr. Strouse at that time did present to him & ask him to sign. Hereupon Mr. Strouse, who was present, says: There was a paper prepared by me which Mr. Pollard was requested to sign.)

57 Qu. Did Mr. Strouse see Exhibit Tube at Allen & Ginter's when he visited that factory in September, 1883?

Ans. Yes; it was in the machine working at the time.

136 58 Qu. Did he give you any order about it?

Ans. He told me that night at Ford's hotel that all the property on the machine belonged to the Bonsack Co., & not to let Mr. Pollard take anything off. He turned everything over to me that night.

59 Qu. Did Mr. Pollard ever try to take anything off the machine?

Ans. The next morning Pollard came up & took out his knife & said he was going to take the tube out of the machine. I told him to hold on till Mr. Strouse came down, who said he *he* would be down that morning from Ford's hotel, but I would not let him take the tube out. He waited till Mr. Strouse came.

60 Qu. When Mr. Strouse came what took place?

Ans. Mr. Pollard told me to stop the machine. I pushed the lever back & stopped the machine. Mr. Pollard said it was his tube & he intended taking it out. Mr. Strouse told me to start the machine. I did so; then I heard no more of the conversation, as both left the room soon after.

61 Qu. Did you hear any other conversation between them afterwards?

Ans. I did not at that time.

62 Qu. After Mr. Pollard left for Europe in January, 1884, did Mr. Strouse, during January, 1884, or late in the spring of that year, visit you at Allen & Ginter's?

Ans. He did.

63 Qu. What time in 1884?

Ans. About 3 months after Pollard left—two or three months.

64 Qu. What passed then between you and Mr. Strouse?

Ans. We talked about business. He was glad to see the work getting on so well.

65 Qu. Did he say anything to you about the tube invented by Pollard or not?

(Excepted to by counsel for def't on the ground that the question is leading.)

Ans. Yes; he had a paper he wanted me to sign at that time.

66 Qu. Where is that paper now?

Ans. Mr. Strouse kept the paper. I did not sign it.

67 Qu. Why did you not sign it?

Ans. I did not think it was treating Mr. Pollard right.

(Counsel for def't excepts to foregoing questions and answers referring to the last-named paper because of irrelevancy.)

68 Qu. What injustice would have been done to Mr. Pollard, if any, by your signing this paper?

(Counsel for def't excepts to the foregoing question because paper should be produced and speak for itself. If in possession of def't, notice to produce should have been given.)

Ans. It was this: that Mr. Pollard made this tube later than he really did. It was a contract or paper stating that he made the model before he made this tube, whereas such was not the case. He made the Exhibit Tube before the model.

69 Qu. How many machines of the Bonsack Co. have they now at Allen & Ginter's?

Ans. Fifteen.

70 Qu. Where were they made?

Ans. Two in Philadelphia; the other 13 were made in Paris.

137 71 Qu. By whome were they made in Paris?

Ans. Gottendorf, I suppose. There is a stamp to that effect on them.

72 Qu. How many had you in 1884?

Ans. The latter part of 1884 I had two.

73 Qu. Where were they made?

Ans. In Philadelphia; so Mr. James A. Bonsack told me.

74 Qu. When did you receive the first machine made in France?

Ans. I don't recollect exactly, either in 1885 or 1886.

75 Qu. How many tubes came with those machines from France?

Ans. None at all.

76 Qu. Where are the tubes made used on the machines at Allen & Ginter's from 1884 to the present?

Ans. They were first made in Lynchburg by Thurmon; now in Salem by Mr. Bowles.

77 Qu. With one of the present tubes before you can you make another like it?

Ans. With the proper tools I could.

78 Qu. Is it a hard thing to do?

Ans. Not for a mechanic to do.

79 Qu. Are you a mechanic?

Ans. Yes, sir.

80 Qu. Was the tongue of the tube which was used in 1883, when you went to Allen & Ginter's, more flexible than that in the tube now used?

Ans. No.

81 Qu. State whether or not the size of the cigarette could be altered, larger or smaller, by pressing down or raising the small end of the tongue of the tube in use in August, 1883.

Ans. No; you cannot alter size of cigarette by raising or lowering the end of the tongue; you would have to make the barrel of the tube smaller or larger to effect the size of the cigarette.

82 Qu. Do you know Mr. Jas. A. Bonsack?

Ans. Yes, sir.

83 Qu. Did he ever say anything to you about testifying in this case?

Ans. Yes; he talked to me one day; he told me it was a good thing I did not testify, for if I had the Co. would not have kept me.

84 Qu. You have stated that you are a mechanic; and I again ask you could Mr. Pollard have made the Exhibit Tube with that mandrel marked "M"?

Ans. No; he could not.

85 Qu. Why could he not?

Ans. Because that mandrel is only to make a single-groove tube; this tube is double grooved.

86 Qu. When Mr. Strouse asked you to sign the paper mentioned by you above, in the spring of 1884, and you refused to sign it, what did Mr. Strouse say?

Ans. He got very mad; seemed to be so, & said if I could not work for the company's interest he did not want a man like that. Then he went away, & came back in about 2½ hours, and told me if I did not want to sign it it made no difference, to work on as I had been working.

138 X examination by counsel for defendant.

By Mr. BURROUGHS, of counsel for def'd't:

1 Qu. You state, in answer to question 2nd, on direct examination, that you are superintendent of the Bonsack Machine Company at Allen & Ginter's, and that you have occupied that position since 9th August, 1883. Are you not mistaken in this? Are you not at present in the employ of the American Tobacco Company?

Ans. No; I am in the Bonsack Machine Company's employ. They have never notified — that I am out of their employment yet or discharged me by letter or in person. I hold them, the Bonsack Machine Company, responsible for my salary until notified by them, the Bonsack Machine Company, that I am not in their employment. I drew my last month's salary from the Bonsack Machine Company in February, 1890, and I expect to draw that for March from them.

2 X Qu. Were you not engaged with E. T Pollard in work before the connection of either of you with the Bonsack Machine Co., and was it not at his instance that you were after that employed by the Bonsack Machine Co.?

Ans. I was engaged in the same shop about 7 years previous, but not for him or by him. We worked in Mr. H. Henderson's shop, in Liberty, together about 7 years before. He did recommend me to Mr. Strouse as being a good man.

3 X Qu. Is not Mr. Pollard at present the manager of the machinery at Allen & Ginter's factory; and are you not under him & subject to his orders?

Ans. He is manager of all machinery except the Bonsack machines. I am manager of them. I am not under Mr. Pollard, but have full control of the Bonsack machines. I have the right to employ or discharge any of the hands under me. I have about 54 in my employment under me at this date.

4 X Qu. Did you not say to Mr. D. B. Strouse, president, on the 15th Jan'y, 1884, in the factory of Allen & Ginter, that E. T. Pollard did not make any tube like the tube marked Exhibit Tube here shown till the latter part of November or first of December, 1883; and did not Mr. Strouse then and there in your presence write your statement down in a small blank book which he carried in his pocket?

Ans. No; I did not. Mr. Strouse did not write anything in his book at all in my presence.

5 X Qu. Did you not, on Tuesday of last week, in the office of Allen & Ginter, voluntarily say to P. A. Krise that you knew nothing about this case and did not know why your deposition was to be taken?

Ans. No, I did not. Mr. Krise asked me what I knew about the matter, as he understood my deposition was going to be taken. I told him I was down here at the time and knew all about it. He said, Well, what you know about it don't amount to much, probably. I said, No, I guess not. This was all I said about the matter.

6 X Qu. How could you state to Mr. Krise that you "guessed" what you knew would not amount to much when you state that you knew all about it?

Ans. Because I had already been summoned in the case; I did not think that was the proper time to speak.

139 7 X Qu. Why did you then speak and say that it did not amount to much?

Ans. I thought it was not the proper time to speak.

8 X Qu. Who summoned you?

Ans. Mr. Dunlop.

9 X Qu. When were you summoned?

Ans. First time Mr. Dunlop told me to come was in Allen & Ginter's factory. He told me to come Monday, and on Monday he said he would not be ready for me till Wednesday.

10 X Qu. How did the tube work that was made by Mr. Pollard, marked "Exhibit Tube"? Did it make good cigarettes?

Ans. It worked very well, and made as many cigarettes, on an average, as we are now making.

11 X Qu. Did not Mr. Strouse say to you on one occasion that your testimony would be needed in this case, and did you not reply that you were then in the employ of the Bonsack Machine Company, and that Mr. Pollard was a friend of yours, and that you desired and expected to have nothing to do with the case, or words to that effect?

Ans. Mr. Strouse told me that he expected he would need me in the case. I told him I would rather not say anything. I could not do the Bonsack Machine Company any good.

By Mr. STROUSE, of counsel for defendant:

12 X Qu. Please examine this tube now shown you, marked Exhibit X in this cause, and state whether you know who made that tube. And, if so, who?

Ans. I do not know. I never saw this tube before, to my knowledge.

13 X Qu. by same. Do you not know that E. T. Pollard made one or more tubes like Exhibit X, and did you not work tubes like that on the Bonsack machine in Richmond at the time or soon after you went to Richmond and before Mr. Pollard made the tube marked "Exhibit Tube," and did you not complain to Mr. Strouse that the closed paper guides of such tubes filled with tobacco and prevented the paper from running in the guides, and did you not have a wire of some length with the end bent off at right angles, which end was made thin and crooked, which were so constructed you used to remove the tobacco from the closed paper guides?

Ans. Mr. Pollard never made any tube like that Exhibit X at Allen & Ginter's while I was there. I never worked a tube like Exhibit X on the machine since I have been at Allen & Ginter's. I never complained to Mr. Strouse that the tobacco got in the guide. I am never bothered with that trouble. I have a wire like that he speaks of to clean out the grooves when the paste gets in, but the tobacco never gets there—at least, I never saw any tobacco in one yet.

14 X Qu. by same. Are you positive in your assertion that after you went to Richmond Mr. Pollard never made any tubes having closed paper guides similar to Exhibit Tube X?

Ans. He never made any at Allen & Ginter's.

15 X Qu. by same. Did he, so far as you know, make any such tube at any other place than Allen & Ginter's?

Ans. None, to my knowledge. He did tell me that he did, on one occasion, show Mr. Thurmon how to make a tube.

16 X Qu. Have you not seen tubes at Allen & Ginter's, at the time you went there to work or soon thereafter, having closed paper guides similar to those on Exhibit Tube X?

140 Ans. I have seen them there at the time I went there with only one groove closed, but not with two grooves, like this Exhibit Tube X.

17 X Qu. by same. You said in your examination-in-chief that

Mr. Pollard made the tube marked (X X X X), which you filed with your evidence in this cause. How do you know that Mr. Pollard made that tube?

Ans. I tell you how I know: I saw him make it, and I know it by the hollow roller of sheet brass—the hollow belt roller made of sheet brass.

And further this deponent saith not.

H. W. GIBBS.

It is agreed by counsel between the parties that exhibit marked (X X X X X) is the model tube made by the pl't'ff, Pollard, and the one from which the drawing in his patent was made.

JOHN DUNLOP, *p. q.*
A. H. BURROUGHS, *p. d.*

The taking of these depositions is this 12th day of March, 1890, continued to to-morrow, at the same place and between the same hours.

OFFICE OF JOHN DUNLOP, ESQ.,
IN THE CITY OF RICHMOND, *March* 13, 1890.

V. D. STOCKBRIDGE, being first duly sworn on the Holy Evangelist, deposeth and says:

1 Qu. by counsel for plaintiff. What is your name, age, residence, and occupation?

Ans. Virgil D. Stockbridge; Washing., D. C.; 52 years; attorney & expert in patent cases.

2 Qu. What has been your experience which qualifies you to testify as an expert with reference to new inventions and letters patent therefor?

Ans. As a youth, having been raised in the country, I was familiar with such machinery as is commonly found & used in country places, and was especially interested in such machinery and studied it for the purpose of knowing and understanding its operation. As a student, I was especially fond of that part of natural philosophy relating to mechanics; later, and beginning about the year 1866, I began to make a special study of new inventions and of making distinctions between new and old inventions, being at that time employed in the office of a firm of solicitors of patents. The special work upon which I was then engaged was the examination in the Patent Office to determine whether certain supposed new inventions were new in fact, and whether there were or were not patentable inventions or devices in the supposed new thing; further duties, that of writing specifications describing new inventions for applications to be filed in the Patent Office; later, and in 1868, I was appointed to an office in the Patent Office, and in September of that year was assigned to duty as assistant examiner. Such duties
141 involve the examination of new inventions, or, rather, alleged new inventions, and the examination of the records and publications in the same art to which the application pertains, the comparison of the new with the old, and the determination of the

question of patentability of the alleged new invention in view of the prior state of the art to which such invention relates. Later, in 1872, I was appointed to the office of a principal examiner, the duties of which are essentially the same as that of an assistant. Later, in 1875, I was appointed to the office of examiner of interferences. In the same year I was appointed as one of the board of examiners-in-chief, popularly known as the appeal board of the Patent Office, and in 1880 was appointed to the office of Assistant Commissioner of Patents, and continued in office until the beginning of 1883. Since that time I have been practising as an attorney in patent cases and as an expert. During all this time since 1866 my duties and my employment have been of substantially the same nature, to wit, the examination and comparison of inventions in machinery to determine their points of likeness and dissimilarity.

3 Qu. Have you read the specifications and do you understand the invention described in Pollard's patent, filed in this cause with Pollard's deposition, marked Exhibit "D"? And, if so, please state in your own way what the invention therein described consists in.

Ans. I have read the specification and believe that I understand the invention therein described. It consists, generally speaking, as stated by the patentee, beginning at line 15, on page 1, of the specification: "My invention relates to improvements in the means for guiding the tobacco to the filler, forming devices, and to 'improvements in the means for guiding the wrapper around the filler and into the closing-up and finishing tube.'" The means shown in the drawing and described in the specification for guiding the tobacco to the filler-forming devices consists of a conveyer or shoot, "marked A." The details of this conveyer consist of a bottom plate (a^1) and side flanges or pieces (a). The bottom plate extends over the roller or guide for the paper strip, which is the wrapper strip, and discharges the tobacco into a trough-like portion and upon the paper-wrapper strip or ribbon. I will say at this point that the patentee says, beginning — line 11, page 2, of the specifications: "The paper strip is carried along on the tube by a belt, as is usual in this class of machines." I will not therefore describe that part or branch of the device, the same being assumed to be well known. The improvement in means for guiding the wrapper around the filler and into the closing-up and finishing tube consist- of a trough-like portion, "C;" a tapering and compressing portion, "D," and a wrapper-closing portion, "E." The part C is a trough-like portion, gradually merging toward a circular form, and where it meets or is joined by the tapering part D approximates a simicircular form in cross-section, and is represented in the drawing at Fig. 4. The tapering portion D is composed, in fact, by the continuation of the trough-like portion, whose edges are bent inwards, so as to converge toward each other, and another piece, also tapering, secured within the side walls of this trough, so as to leave a space between
142 the lower edges of this inserted piece and the continuation of the trough C. These spaces between the two parts of the compressing tubes constitute guides, one on each side, for the paper and the carrier belt. These guides are marked on the drawing of

the specification (*d*) and (*d*). That on the right-hand side of the tube is marked (*d*) and extends nearly to a point as "*o*," where the edges of the paper would cross each other when the outer edge of the lower part of the tube (continuation of part *c*) is bent up or outward, and forms or constitutes an abutment against which the paper rests when the paste wheel is applied in the process of pasting the edge of the wrapper. The guide (*d*) ,on the left-hand side of the tube, continues to a point marked (O′) on the drawing, which is opposite the end of the tapering portion of the tube, and the paper is led from the guide at that point within a cylindrical part, which is slightly larger in inside diameter than the outside diameter of the tapering portion D. One edge of the paper at this point passes within the cylindrical portion in contact with the tobacco and is then carried on within said tubular portion until it is met by the other pasted edge of the wrapper at the entrance of the closing portion E, where the abutment guide *d″* is bent down to bring the pasted edge down upon the outside of the other edge of the wrapper. Based upon a structure such as I have described, & which I find illustrated & described in the specification, the patentee claims as being of his invention a tube having two converging guides—one for each edge of the paper wrapper; one guide terminating in (having) an abutment to hold one edge of the paper and the other guide passing or extending in front of and up to the beginning of a cylindrical part of the tube designated in the specification as a slit, this portion serving to guide or force one edge of the wrapper down onto the tobacco and so that when the two edges of the wrapper come together one may overlap the other. The patentee also claims essentially the same structure in a somewhat more limited or particular form. The patentee sets forth in substance in his specification that there were certain defects in the older forms of machines, wherein the unpasted margin of the wrapper, being unsupported, becomes crumpled or wrinkled to an extent that the cigarette lacks neatness of finish, and moreover that the unpasted margin is liable to be bent back and torn if the wrapper travels at high speed. He also states the object of his invention to be to overcome the disadvantages of the old form of device referred to. Assuming the statement as to the defects in prior machines to be correct, and that the new invention described in the patent obviates or overcomes said defects, the patentee has made a new invention involving a new mode of operation as compared with what is in effect declared to be the prior state of the art. According to the old plan of guiding but one edge of the paper wrapper in a space at one side of the tube, the effect, as I understand it, would be greater tension on the unguided edge than there would be on the other edge, which is within the guide channel, and by reason of such uneaquel tension the edge which is in contact with the tobacco as it passes through the tube is liable to be folded or brought backward and also to be puckered or
143 crumpled, and the result would be, as alleged in the patent, an imperfect cigarette by reason of the crumpling or by reason of the failure of the pasted edge to reach over and become

pasted to the other. Otherwise stated, that edge of the paper not provided with a guide, coming in contact with the inside surface of a tapering tube is subjected to a frictional strain, which has the tendency to crumple; and, moreover, the wrapper, as it is brought down upon and compressed against the tobacco, may be pressed between the tobacco & the inside surface of the tube in such way as to leave a fold in the wrapper itself; that is to say, the bite or pressure on the paper may first take place at two points in the circumference at a distance from each other, and then the tobacco & wrapper, being compressed together, would leave a surplus or bagging of paper between the points where the pressure or bite takes place, and this would be much more likely to be the case were the filler to be of a prismatic or other than cylindrical form.

4 Qu. Have you read the specification, and do you understand the invention described in Hook's patent entitled Exhibit "A" in this cause? And, if so, please state in your own way what the invention therein consists in.

Ans. I have read the specification & do understand the invention therein described. The invention described therein may be said to be somewhat primitive, and is of a machine intended to make cigarettes. By tender handling it is possible that cigarettes could be made by such a machine; and if tough, heavy paper be used for the wrapper it is possible they might be made with more rapidity than by hand. In this case the paper wrapper passes from a reel into and along the trough-like part (*c*), having a mouth such as shown in Fig. 6, the paper being thence led through the cylindrical part D, where the overlapping edges are caused to adhere to each other, one edge having been properly pasted by a paste-wheel B. The tobacco is fed from a hopper onto the paper as it passes along the trough. The wrapper and the already formed end of the cigarette are intermittently run forward by means of a vibrating lever, G, provided with jaws L L. I fail to find in this case a compression or closing up and finishing tube such as found in the Pollard patent. Indeed, I find nothing in the Hook specification which is described by Pollard as being *if* his invention. The part wherein the tobacco is compressed has no guide corresponding in structure or function with the supplemented guide (*d*) found in the Pollard patent.

5 Qu. Have you read the specification and do you understand the invention described in Bonsack patent 238,640, filed as Exhibit B in this cause? And, if so, please state in you- own way what the invention therein described consists in as compared with the Pollard patent.

Ans. I have read the specification referred to, and I find that the invention, in part, relates to means for rolling the tobacco into a filler and then wrapping and pasting the paper around it. As this branch of the invention is all that in any manner bears upon the Pollard patent, I will confine my answer to such parts. In the machine described in the specification referred to, the tobacco is first formed into a rope-like body or filler, and after being brought
144 to such condition it is delivered to what the patentee calls a

set of paper wrapping and pasting devices, consisting of a trough, G; a wrapping tube, G, shown in Fig. 8. An endless belt, G, carries both the paper strip and the compressed tobacco roll through the trough G, and thence through wrapping tube G. To prevent the tobacco roll from choking as it passes into the wrapping tube, a positive feed is given to it just as it passes from the trough to the tube, by means of a toothed wheel, H. As the tobacco roll and paper strip passes into the trough, its curved edges give an incipient curve to the paper, and after it has entered the tapering tube the curving and wrapping of the paper around the roll proceed on one side only, by reason of a spiral groove (*a*), Fig. 8, for the edge of the belt. As soon as the complete circumference is made, the guide-groove (*a*) openes in the form of a longitudinal flange or lip (*b*), which allows the upper or lapping edge of the paper to be exposed long enough to receive paste on its under edge, after which the tube closes again, as in Fig. 9. In order to permit the pasting to be successfully accomplished the paper strip H must be wider than the belt by the distance of the lap in the cigarette, and this increased width must be on the inner edge of the paper (Figs. 10 & 11). In this patent the tobacco is first formed into an endless rope or cord, and then passes through a trough into a wrapping tube, which is convergent to some extent, and is provided with a spirally arranged guide-slot (*a*) on one side for guiding the edge of the paper which receives the paste. There is no guide for the other edge of the paper corresponding in structure or function with the guide (*d*) of the Pollard patent, and, as stated in the specification, the paper wrapper strip must be wider than the carrier belt, whereas in the Pollard patent there is no such requirement, according to the illustration in said patent. Pollard's compressing tube is provided with guide slots or spaces for both edges of the paper wrapper, and these guides, though convergent, are straight, whereas the wrapping tube of Bonsack has a single guide only, and said guide is spiral instead of straight. Bonsack first forms his tobacco into a rope or cord like condition, and passes it through a wrapping tube at G, whereas Pollard takes his tobacco, in a relatively loose condition, and passes it into a tapering tube having the function of compressing the tobacco and partially wrapping the same, and passes thence into a cylindrical part which is called the wrapper-closing tube. In order to insure the proper feeding of the rope of tobacco, Bonsack provides a feed-wheel, H. Pollard's machine requires no such instrumentality. In the Bonsack machine, according to the allegation in the Pollard patent, the wrapper is liable to become puckered or rumpled at the edge, and imperfect cigarettes produced by reason of difference of tension between the two edges of the wrapper as it passes through the wrapping tube. In the Pollard machine no such defect or difficulty is experienced.

6 Qu. Have you read the specification and do you understand the invention described in Bonsack's second patent, No. 247,795, filed in this cause as Exhibit C? And, if so, please state in your own way what the invention therein described consists in

145 when compared with Bonsack's patent, No. 238,640, Exhibit B in this cause, and Pollard's patent, Exhibit D in this cause.

Ans. I have read the specification referred to and understand the invention therein described So far as the invention relates to the subject-matter of the Pollard patent and to that part of the Bonsack patent which I have just described, the invention, as clearly stated by the patentee, Bonsack, beginning at line 60, p. 1, of the specification, consists in the novel construction and arrangement of the filler-forming devices, for which purpose I used three steel belts, which are arranged to form a converging trough, and all travel in the same direction and co-operate with the wheel which presses the filler into an approximately square shape. There is no allegation in the specification, so far as I can find, defining or describing any change having been made in the wrapping tube or in any guides or slots connected with said tube. The change from the machine described in the original patent, 238,640, to that in the patent under consideration, 247,795, relates to parts of the machine outside of anything described or claimed in the Pollard patent, and this patent has no bearing whatever upon the Pollard invention greater or beyond what is found in the first Bonsack patent, 238,640, and all of the points of difference recited as existing between Pollard's and Bonsack's first patent may be repeated with regard to his second patent, and with the addition that the approximately square form of filler provided for in the last patent would have the tendency to augment the difficulty of puckering and crumpling of the wrapper found in the original Bonsack machine.

7 Qu. Please look at this tube marked X X X X X (admittted by counsel on both sides to be the model from which drawings for Pollard patent were made) and the tube filed in this cause as "Exhibit Tube," & say wherein they differ in principle & construction, if there is any.

A. I have the tubes marked X X X X X and "Exhibit Tube" before me. I find in X X X X X tube that the guide slot or space as (*d*) of the patent is entirely closed from the beginning of the tapering part D to the part marked O, and the guide space or slot (*d'*) is also entirely closed to a point near the point marked O' of the patent. In the "Exhibit Tube" the corresponding guide slots or passages are substantially left open, the tapering part (*d*) being connected with the continuation of (C) by means of ears, or brackets, or straps. This, so far as I now discover, is the only difference between the two tubes, and this difference is purely and entirely structural. The function of the guides in the two tubes is exactly alike and operate on the same principle. A multiplication of the sustaining or holding straps in "Exhibit Tube" so as to bring their edges close together would produce essentially the same structure as that shown in Exhibit X X X X X. In other words, the soldering together of the tapering part D to the tapering continuation of the part C, leaving a slot or space between the edges or walls of the two parts, amounts to a continuous means of attachment, whereas the straps in Exhibit Tube are intermittent. The same guide space outside the lower

edges of the inserted part D is found in both cases, and it is
146 immaterial whether such spaces which constitute the guide groove are housed over or closed at one edge or not.

8 Qu. Please look at Exhibit X X X X, filed in this cause as a tube used by the Bonsack Co. under the Bonsack patents, & say whether or not this is the tube described in Bonsack patent, and whether or not it differs from tube X X X X X, & wherein it differs, if at all.

Ans. I have the tube X X X X referred to before me, and while it is not in the proportion illustrated in the Bonsack patent 238,640 it contains all of the elements shown and described in said patent, so far as the wrapping tube is concerned—that is to say, it has a trough part (G) & a wrapping tube (G′); a guide-groove (c), a flange section (c^2), and a flange (b'), all having the same relative relation and the same functions as the parts named in the patent. I find no other elements in the exhibit beyond what I find disclosed and fully described in the patent. It differs from the tube X X X X X in failing to disclose two guide grooves, one for each edge of the wrapping paper. A structural difference is also found in this—the tapering part of tube X X X X is made from a single piece of metal bent to a volute form in cross-sections, as follows,



leaving a guide slot or space, as x in foregoing drawing, for one edge of the paper wrapper and the belt. In tube X X X X X the tapering part is formed of two approximately semi-cylindrical parts, one of smaller diameter than the other, as follows,



so that there are two grooves or spaces X X, one on each side, through which the opposite edges of the paper wrapper & belt are led. By reason of this construction the tobacco, as it is compressed, packs midway of the width of the paper, both edges being protected from pressure, and upon leaving these spaces the edges of the paper are led or conducted inside a cylindrical portion and are brought together and pasted together. In the Exhibit X X X X there is no part corresponding in function with the boundary of what is termed in the Pollard patent (O^2), which is in fact the beginning of a cylindrical portion of the tube.

9 Qu. Look at tube marked X & say if it differs in principle and structure from X X X X X or from "Exhibit Tube"; &, if so, in what particulars.

Ans. There is no structural difference, &, consequently, no functional difference between X and X X X X X. There is no functional

difference between X and Exhibit Tube. The structural difference is that between X X X X X and Exhibit Tube.

10 Qu. Look at Exhibit X X and say whether an invention or cigarette machine using that tube would be an infringement on Pollard's patent or not.

(Counsel for defendant excepts to foregoing question as wholly illegal, as a question of infringements is one of the questions to be decided by the court, & while an expert in patent cases may testify as to facts & descriptions his opinion cannot be legally taken on a question of infringement.)

147 Ans. I have the Exhibit X X before me and find embodied in it every ingredient or element recited in the claims of the Pollard patent—that is to say, I find a tube having two converging guides, one for each edge of the paper wrapper, one of the guides having an abutment to hold the edge of the paper during the process of applying the paste, and the other passing up to and within a slit or opening formed across the path of the other edge of the paper to force or guide it under or within the cylindrical part so that the first edge will overlap that part as it proceeds further on. This tube is constructed in every essential particular like that described in the Pollard patent & operates on precisely the same principle.

11 Qu. State what difference, if any, there is between this tube X X and that described in the Pollard patent in all essential particulars.

(Counsel for defendant excepts to foregoing question on the ground that it is leading and illegal.)

Ans. I find no difference of function between the Exhibit X X and the compressing tube with its appendages described in the Pollard patent. The only visible difference is opposite the trough portion. It appears as though intended that the carrier belt should pass below the trough and come into the compressing tube near its mouth & there joined & carry along the paper wrapper upon which the tobacco has been deposited. From the beginning of the compressing tube to the discharging end of the cylindrical part E, I see no functional difference. In Exhibit X X I find a sliding tongue-like part which completes the cylinder of the cylindrical part, but what purpose such tongue or sliding part has I do not know; there may be some advantage in its use, but notwithstanding its use the tube, as a whole, operates on the same principle as that described in the claim in the Pollard patent and contains or embraces all the elements & functions of said patent.

12 Qu. What advantage has Pollard's patent over the Bonsack and Hook patents, if any?

(Counsel for defendant excepts to the foregoing question on the ground that it is leading and illegal.)

Ans. Understanding that "patents" means the inventions described in said patents, I have to say that some of the advantages are those recited in the specification of the Pollard patent—that is

to say, the Pollard machine is not subject, or rather does not subject, the paper wrapper to unequal tension and thereby crumple or wrinkle the wrapper, and does not, when worked at considerable speed, tear the wrapper or fail to paste the edges together, as is liable to be the case with the Bonsack machine.

13 Qu. As examiner or Commissioner of Patents, in view of the prior state of the art as disclosed by the Hook & Bonsack patents, filed in this cause, state whether or not Pollard's invention possesses such novelty & utility as to entitle it to the grant of a patent.

(Counsel for def't excepts to this question because it is illegal, in this, that the witness has not shown any general knowledge on his part of the prior state of the art, & hence cannot say to what the patentee was entitled under the state of the art.)

148 Ans. In my judgment and in view of the state of the art as indicated, Pollard was clearly entitled to a patent for his new invention, & as Commissioner of Patents I should have so adjudged had the case come before me for adjudication.

And further this deponent sayeth not.

VIRGIL D. STORKBRIDGE.

STATE OF VIRGINIA, *City of Richmond,* } *To wit:*

I, J. H. Webb Peploe, a notary public for the city aforesaid, in the State of Virginia, do hereby certify that the foregoing depositions were duly taken, sworn to, & subscribed before me at the times and place mentioned therein.

Given under my hand this 13th day of March, 1890.

J. H. WEBB PEPLOE, *N. P.*

Deposition of H. F. Newberry.

U. S. Circuit Court, Western Dist. of Va.

E. T. POLLARD, Complainant,
vs.
BONSACK MACHINE CO., Defendant.

Testimony taken in behalf of defendant for final hearing, pursuant to the 67th rule of the U. S. Supreme Court in equity as amended, before William T. Tawham, a notary public for the county and State of New York and special examiner by consent herein.

NEW YORK, *August 29th,* 1890.

Attended at the office of Messrs. Duncan & Page, counsel for defendant, No. 120 Broadway, in said city.

Present: R. H. Duncan, Esqr., for defendant, and J. H. Webb Peploe, Esqr., of counsel for complainant.

HENRY F. NEWBERRY, being called in behalf of defendant and duly sworn, testifies as follows:

Questions by defendant's counsel:

149 1 Q. What is your name, age, residence, and occupation?

A. Henry F. Newbury; 48 years of age; I reside at 142 Park Place, Brooklyn, N. Y., and am at present engaged as manager of the time-lock department of the Holmes Burglar Alarm Telegraph Co., whose office is at 518 Broadway, New York city; and am by trade a machinist.

2 Q. State what opportunities you have had for familiarizing yourself with mechanical inventions and structures of various kinds, and with letters patent granted therefor, and generally what experience you have had in acting as an expert in regard to patented inventions and in testifying in suits before United States courts?

A. When a young man I learned the trade of a machinist, and have worked at that trade, more or less, up to almost the present time; and while so engaged I became familiar with the use of tools and machinery, as well as the working of metals and the making of mechanical drawings. I have had frequent occasion to design various structures and mechanism and make drawings therefor, and construct and superintend the construction of such mechanism, as well as others not designed by me.

For the past twelve years I have devoted a large portion of my time to matters pertaining to patents and patented inventions, and while so engaged have read and studied the specifications and drawings of large numbers of patents, both foreign and domestic, to enable me to point out the similarities and dissimilarities between the structures therein shown, described, and claimed, and structures and devices, both patented and unpatented.

I have frequently been called upon to testify in the U. S. courts and elsewhere as an expert witness to point out similarities and dissimilarities between various structures and mechanisms therein in controversy. I will also state that I have had granted to me some twenty-five patents on inventions of my own.

3 Q. State what special opportunities you have had, if any, to become familiar with the construction and operation of cigarette machines and the behavior of tobacco while being made into cigarettes by such machines, as well as of letters patent granted for cigarette machines.

A. I have read and studied quite a large number of letters patent granted upon cigarette machines, and have become familiar with the construction of such machines as therein shown and described. I have superintended the construction of a cigarette machine, and very frequently operated the same, and studied carefully the behavior of tobacco while being formed into a filler and wrapped with a paper strip, the strip being gradually formed from the flat into the tubular or cylindrical form, and continuously and gradually wrapped around the tobacco forming the filler of the cigarette. I have frequently examined and studied the operation of other cigarette machines operated upon substantially the same principle—that

is, making a continuous cigarette rod, which was afterwards to be cut up into smokable lengths. I have frequently experimented with tobacco so as to learn its behavior during the operation of being formed into cigarettes.

4 Q. State whether you have read and do you understand the specification and drawings of complainant's exhibit Pollard patent marked Exhibit D in this suit?

A. I have very frequently read and studied a printed Patent Office copy of the said Pollard patent, and believe that I understand the construction and operation of the device or apparatus therein shown and claimed.

5 Q. State what you understand, from the construction shown and described in said Pollard patent and from your observation of the operation of cigarette machines and of the working of tobacco and examination of various patented constructions in cigarette machines, must be the condition of tobacco when it is fed through the
150 guide designated in the drawing of the patent as guide A and delivered into the trough C, and give reasons for any answer you shall make.

A. Cigarette machines, at the present time, I believe, almost universally use what is known as fibrous tobacco in contradistinction to what is known as granulated tobacco for the fillers of the cigarettes made upon them. This fibrous tobacco is made by cutting the leaves of the tobacco into narrow or fibrous strips and then moistening and otherwise preparing such tobacco before it is delivered to the machine to be made into cigarettes, and when it is so delivered these fibers or small strips of tobacco are interlaced and formed together in more or less of a mass. In order to feed this mass of tobacco in a uniform and continuous stream to the paper strip which forms the wrapper of the cigarette, the fibers are more or less separated from each other by suitable mechanism or otherwise and delivered in such separated condition to a portion of the mechanism which afterwards collects and gathers such separated particles into a nearly uniform stream. All machines with which I am acquainted, as being in practical operation, do this work of separating by means of picker mechanism moving at a high rate of speed, so as to disintegrate or separate the tobacco as heretofore described, and as it comes from the picker mechanism it is gathered and compressed into a more or less complete filler, and in this condition such filler can be pushed or projected over a certain extent of space unprovided with means for feeding or carrying such filler. An examination of the said Pollard patent discloses the fact that in the specification there is described, and in the drawings shown, a trough-like structure designated in said patent as a "guide, A," and that this guide A is interposed between what are termed in said patents as feed-belts and a trough-like portion of the wrapping tube of said patent designated therein by the letter C. The said last-named part contains the flat paper strip which is to be afterwards formed into the tubular or cylindrical shape to wrap the filler and form the cigarette. This guide A, as shown and described in said Pollard patent, consists of a bottom plate with two sides or walls,

thus forming a trough which bridges over the space between the point at which the feed-belts stop and the paper strip or wrapper commences. Said examination also discloses the further fact that there are no means or mechanism provided for carrying or conveying the tobacco along and through said trough or guide A. Said examination also discloses the fact that the drawings show that the space between the sides or walls of the said guide A is only about two-third- that of the entrance or mouth of the closed tapering portion of the wrapping tube, and also that at such entrance or mouth the paper strip encircles less than half the space of such entrance or mouth. In view of all these facts, and my knowledge of the condition under which tobacco is worked in cigarette machines, there is only one way to cause the tobacco which is to be fed to the paper strip or wrapper to move along and through such guide A in a practically uniform mass, and that is by so collecting and compressing the loose tobacco before it is delivered to such guide that the individual particles or fibres will be in close enough contact with each other to enable each following fiber or particle to push and force along each and every preceeding one, and that this must be done without such fibers moving in closer contact with each other until the fibers or particles first entering such guide are deposited upon or delivered to the paper strip or wrapper to be carried along in contact with such strip or wrapper, or, in other words, the loose tobacco from the hopper B must necessarily be collected and compressed into such a compact and rod-like form that it will be pushed or projected along and through the *the* guide A without in any way being further compressed or its length shortened, for if further compression takes place the tobacco cannot be delivered to the wrapper in a practically uniform mass as is required. Loose tobacco or tobacco which has been separated, as I have heretofore described,
151 cannot, under any circumstances with which I am acquainted, be fed or conveyed along and through the guide A without some means or mechanism, not shown or described, being provided to do this work. Again, the distance between the sides or walls of the guide A and the height of such sides or walls clearly indicate that the size of the stream of tobacco was to be less in cross-section to a very considerable extent; in fact, almost a half of that of the entrance or mouth of the closed tapering portion of the wrapping tube, which is to receive it, and, in my opinion, a stream of loose tobacco like that used in the Bonsack and other machines with which I am acquainted, before it is compressed, which could be contained within the space bounded by the walls or sides of the guide A, would not contain tobacco enough to make a filler of the size required by the cigarette made by the tube shown in the drawing of said patent.

Because of all the above facts I am clearly of the opinion that the condition of the tobacco when it enters the guide A must necessarily be compressed into at least a partially formed filler, and that it is not in the loose condition or state, as it might be inferred to be, by the use of the term "loose tobacco," found in line 59 of page 1 of the specification of said Pollard patent, which term might mean

that such tobacco was tobacco unconfined by a wrapper in contradistinction to tobacco confined by a wrapper, instead of meaning tobacco in the loose state, which I have heretofore described. Other facts point to the same conclusion, but I deem the above sufficient for the present answer.

6 Q. State what you understand to be the invention or improvement which is recited in the two claims of the said Pollard patent, and which is particularly described in the specification and shown in the drawings thereof.

A. The claim- of the said Pollard patent are two in number and are as follows:

1. In a cigarette machine, a tube having two converging guides—one for each edge of the paper wrapper—one guide terminating in an abutment to hold one edge of the paper extended and the other passing in front of and up to a slit or opening formed along the line of said abutment to force the opposite edge of the wrapper under so that the first edge will overlap the same, as set forth.

2. The compressing tube described, consisting of the trough C, the tapering portion D, the cylindrical portion E, the tapering portion having two converging guides for the wrapper, one guide terminating in an abutment, as *d*, and the other extending up to a longitudinal slit or opening, *o*, formed along the line of said abutment, all combined and operating as and for the purposes set forth.

The said Pollard patent relates generally to a mechanism for making what is known as continuous cigarette rods, which are afterwards to be cut up into smokeable lengths or cigarettes, and has especially to do with the application of the continuous paper wrapper to a previously formed cigarette filler—that is, "to improvement in means for guiding the wrapper around the filler and into the closing-up tube."

The mechanism by means of which this operation is carried on is described in the specification of the Pollard patent as follows:

"The peculiarity of construction of my compressing tube is that from its entrance or longer end of the portion D are arranged guides *d d*, one of which, *d*, extends to the point *o*, where the wall of the tube is bent outward, as shown, to form a guide and abutment, d^2, for one margin of the paper strip, while the other guide, *d*, continues to the point *o*, thus forming a guide which is closed around the edge of the paper strip so as to support and guide the unpasted margin to almost the very point where the pasted margin is closed upon it. Between the points *o* and *o*—that is to say, along in front of the abutment guide—is arranged a longitudinal opening, and the wall of the guide *d* passes below the plane of the guide *d* at this
152 point to allow one edge to pass under or below the other edge of the wrapper. The abutment and guide *d* is bent down at the entrance of the closing portion E, so as to fold over the edge of the wall upon which is formed the guide *d*; and as the unpasted margin of the paper passes from the guideway formed by the guide *d* and into the closing tube, the pasted margin is guided down upon it and the two are pressed together by the closing portion of the tube. The paper strip is carried along on the tube by a belt, as is usual in

this class of machines, and is pasted by the ordinary means; and as my invention has no relation to improvement of the mechanism for the purpose, a detailed description of the same is deemed unnecessary.

From the statements found in the latter portion of the above-quoted description, I understand that the mean semployed for applying paste to the edge or edges of the wrapper and of moving the finished cigarette along through the machine are immaterial so long as such means are those ordinarily employed for such purposes before the date of the Pollard invention. Claim 1 of said Pollard patent, when read in the light of the above-quoted description, sets forth, as I understand the matter, a wrapping tube for use in a cigarette machine of the heretofore-described class, having the following characteristics—that is, a wrapping tube having two closed converging spiral guides, one for each edge of the wrapper, to guide each of such edges during their spiral movement into the cylindrical or tubular form. One of these closed guides terminates in an abutment, to hold the corresponding edge of the wrapper extended, and the other closed spiral guide extends up to and passes in front of the abutment, which is longitudinally of the wrapping tube, to force the opposite or corresponding edge of the wrapper under the extended edge, so that the extended edge will overlap the forced-under edge when the former is finally brought down upon the latter.

Claim 2, when read in the light of the same description, sets forth substantially the same wrapping tube as is set forth in claim 1; but in somewhat more limited language. As I understand the matter, both claims set forth substantially the same structure, or wrapping tube; but in somewhat different language.

Turning back to the descriptive part of the specification of the said Pollard patent, I find, after describing the construction of the guide *d*, for the unpasted edge or margin of the wrapper, that it says, "thus forming a guide which is closed around the edge of the paper strip, so as to support and guide the unpasted margin to almost the very point where the pasted margin is closed upon it." Now, in order that the guide *d* shall be capable of performing this function of supporting and guiding the unpasted margin of the wrapper, as just described, or, as stated in claim 1, "to force the opposite edge of the wrapper under so that the first edge will overlap the same," such guide must necessarily be a closed one—that is, one "which is closed around the edge of the paper strip," for if it was not so closed the part or portion which is to perform this function of forcing, supporting, and guiding the unpasted margin, or that margin which is at the left-hand side of the wrapping tube, when such is viewed from the point where it receives the wrapper and tobacco, is entirely wanting, and other and different means would then necessarily have to be employed to perform this function.

A closed guide, *d*, such as is shown in the drawings and described in the specification of the said Pollard patent, would perform the function described in that specification, and which is also set forth in the claims of that patent.

Counsel for plaintiff objects to the foregoing question and answer thereto on the ground that the question of construction of a patent is one for the court, and on the further ground that counsel in propounding interrogatories on this subject should do so in the form of hypothetical questions, and should leave it to the court to adopt or reject any or all of the expert answers and constructions as
153 that which the court may consider the right one.

Counsel for defendant states that in asking the above question he had no intention of encroaching upon the domain of the court, but asked a question which he understands is in the usual form in such *cas* cases, and by which he designed to bring out the mechanical construction of the parts referred to in the claims of the patent, and thereby aid the understanding of the court, and he further states that he understands the witness in his answer thereto has pursued this course and simply given his understanding of the construction and operation of the parts referred to in the claim.

7 Q. Look at the tube now shown you, heretofore offered in evidence and marked Exhibit X, and compare the same with the construction of the tube claimed in the said Pollard patent and particularly described in the specification thereof, and state whether Exhibit X correctly embodies the construction of the tube of the Pollard patent.

A. I have made the comparison called for by the question. I find in the said tube, Exhibit X, two openings into the left-hand closed spiral guide of that exhibit which I do not find — the tube described and claimed in the said Pollard patent. Otherwise than in respect to these two openings, I do find that said tube, Exhibit X, embodies with substantial correctness the mechanical construction of wrapping tube set forth in said Pollard patent. I would add that at the extreme end of the trough-like portion of the wrapping tube, where the paper strip or wrapper enters such tube, that there is another opening which I did not take into consideration and which escaped my notice at the moment when I stated that there were two openings in such guide. From this it will — seen that there are three openings in the left-hand closed spiral guide, which openings are not found or referred to in said Pollard patent, and therefore, with the exception of these three openings, the said tube, Exhibit X, embodies with substantial correctness the mechanical construction of that patent.

8 Q. Compare the tube now shown you, which has previously been offered in evidence in this suit and marked Exhibit X X, with the construction of tube described and claimed in said Pollard patent and substantially embodied, as you have said, in Exhibit X, and point out any similarities or dissimilarities in the construction and operation of the two tubes, and state whether or not, in your opinion, the tube Exhibit X X contains or embodies the improvement described and claimed in said Pollard patent, and give your reason for any answer you may make in the premises.

A. I have made the comparison called for in the question, and find that the tubes are similar to each other in the following re-

spects: Each tube is designed for use in a cigarette machine as a wrapping tube with which a paper strip or wrapper is to be continuously formed into a tubular shape and wrapped around a continuously formed filler; also that each tube is composed of what may be termed four distinct*ed* and separate parts joined together to form one complete structure. These four parts may be described as follows, viz: The first or a trough-like portion, at the entrance of which the paper strip or wrapper enters the tube in the flat shape and is partially curved when it leaves this first or trough-like portion of the tube, which part is designated in the said Pollard patent by the letter C; the next or second part or portion is closed and tapering from its entrance or mouth to the point where it joins the next or third part or portion, and is designated in the said patent by the letter D; the third or next adjoining part or portion is partly cylindrical in form and is not designated by any letter in said patent, and I will for convenience designate it by the letter Y; the fourth or last part or portion of this wrapping tube is connected to the third portion and is wholly cylindrical in form, and is designated in said Pollard patent by the letter E; and I will hereafter refer to these four parts by the above letters, adding thereto the words "trough," "tapering," "partly cylindrical," and "wholly cylindrical."

154 Each of the above-named wrapping tubes is provided at its right-hand edge or side with a closed spiral guide for the right-hand edge or pasted margin of the wrapper, which begins at the commencement of the trough part C and extends to a point near midway of the length of the tapering part D, and there terminates in an abutment, along in front of which there is a slit or opening into which the right-hand edge or margin of the paper strip or wrapper is received and held while paste is applied thereto. Said slit or opening, as well as the abutment, terminates at the beginning of the wholly cylindrical part E of the tube where the abutment is turned down upon such part E, so as to direct the right-hand edge or pasted margin of the paper into such part, so that underlapping or pasted edge will be brought into close contact with the overlapping or pasted edge.

In referring to the left-hand edge or side of the tube Exhibit X, I will assume for the purposes of the present comparison that the three openings into the closed spiral guide of that side or edge of the said exhibit do not exist and will not further refer to them.

Each of the said tubes, Exhibit X and Exhibit X X, have along the left-hand side or edge of the trough-like part C a closed spiral guide which continues to the entrance or mouth of the tapering part D.

In all of the above-named respects the two tubes are substantially alike or similar to each other and perform the same functions in precisely the same way.

The two tubes, Exhibit X and Exhibit X X, are dissimilar or different from each other in the following respects: The tube Exhibit X has at its left-hand edge or side and along the whole length of the tapering part D a *col*sed spiral guide which is a continuation of the closed spiral guide along the length of the trough part C of

that tube. This closed spiral guide of Exhibit X extends up to and in front of a slit or opening formed along the line of the abutment on the opposite side or edge of the tube, and, in the language of the specifications, "forming a guide which is closed around the edge of the paper strip so as to support and guide the unpasted margin to almost the very point where the pasted margin is closed upon it."

The wall of this closed spiral guide of the tube Exhibit X also "passes below the plain of the guide *d* at this point to allow one edge to pass under or below the other edge of the wrapper," as stated in the specifications of the said Pollard patent, the guide *d* herein referred to being the guide upon the right-hand side or edge of the tube and opposite to a portion of the left-hand closed spiral guide, which left-hand guide is designated in the specifications of said patent by the letter *d*.

The tube Exhibit X X does not have such a closed spiral guide throughout the length of the tapering part D as I have just described as being found in the tube Exhibit X, nor does it have any guide whatever upon its left-hand side or edge which extends up to and in front of a slit or opening formed along the line of an abutment upon the opposite side or edge of the tube to force the opposite edge under, as stated in claim 1 of said patent, nor does it have a guide which passes below the plane of the guide *d* at the point where such guide terminates to allow one edge of the wrapper to pass below or under the edge. In fact, there is no guide whatever found upon the left-hand side of the said tube, Exhibit X X, which might not just as well be dispensed with entirely so far as concerns any guiding or supporting action or function which it may exert. The tube Exhibit X X does have a closed guide upon its left-hand edge which terminates in an abutment alongside of which there is a slit or opening almost identical in construction with the guide and slit of the opposite or right-hand edge of said tube, but, as just explained, this left-hand spiral guide of Exhibit X X does not pass below the plane of the guide upon the opposite edge of the
155 tube, but it terminates at precisely the same point *o* and in the same plane with such opposite guide, and this left-hand closed spiral guide of Exhibit X X does not pass in front of and up to a slit or opening formed along the line of the abutment on the opposite or edge of the tube, as is the case in the left-hand closed spiral guide of the tube Exhibit X.

The 2 tubes, Exhibits X and X X, by reason of the difference in the construction of the left-hand closed spiral guide formed on each one of them, as just described, in the three particulars named, cannot and do not perform the same function or operation upon the left-hand edge or unpasted margin of the wrapper.

The closed spiral guide of the tube Exhibit X gradually and continuously acts upon the very edge of the paper strip or wrapper to guide such edge in the proper direction as well as to support that portion of the strip or paper contained within the guide to force such edge under, so that the first or pasted edge will overlap the same, or, in other words, to guide and support the left-hand edge of

the paper strip or wrapper up to almost the very point where it is brought into the desired and tubular position to receive the tobacco which composes the filler, and this work is entirely accomplished by such closed spiral guide, which, as before explained, is constructed wholly upon the tapering portion D of the wrapping tube, and therefore this whole work is done before the partly cylindrical portion Y of the tube is reached.

The tube Exhibit X X, as before stated, has a spiral closed guide upon the left-hand side, which terminates in an abutment which has a slit or opening formed along the line of it, which slit and abutment terminate at the beginning of the partly cylindrical part Y of the tube, and by reason of the abutment and slit so terminating and being so arranged the beginning or entrance of such partly cylindrical part Y is opened at its top so as to receive that edge of the wrapper in the same manner that the opposite edge of the wrapper is received in wholly cylindrical part E, and the work of bringing the said left-hand edge of the wrapper into the desired position relative to the other edge and the filler of the cigarette is done abruptly and by the partly cylindrical part Y, and not by any guide whatever upon the tapering part D of the tube, and therefore this left-hand edge or unpasted margin of the paper is acted upon differently and by entirely different means to bring it into the desired relative position in regard to the opposite edge of the wrapper and the filler of the cigarette in said Exhibit X X than is the case in tube Exhibit X.

Because of the above-named facts the said Exhibit X X does not contain the left-hand closed spiral guide *d'* of the tube Exhibit X or any equivolent for it.

I have heretofore stated that the guide and abutment on the left-hand side of the tube Exhibit X X might be entirely omitted or dispensed with so far *any* any guiding or supporting action that they may have is concerned, and to illustrate this fact I have had a tube similar in construction to that of Exhibit X X changed in this respect along the whole length of the tapering part D, and the simple moving of a strip of paper through such tube fully demonstrates the correctness of this statement.

Because of the dis-imilarities or differences between the left-hand edge or side of the tubes, Exhibits X and X X, I am clearly of the opinion that the tube Exhibit X X does not contain or embody the improvement described and claimed in the said Pollard patent.

Adjourned to Saturday, the 30th instant, at 10½ a. m.

SATURDAY, *August 30th*, 1890.

Met.

Present: Counsel as before; and the witness continues as follows:

156 Another and additional reason for the opinion just heretofore expressed regarding the dissimilarity between the tubes, Exhibit X and X X, is found in the fact that the tube Exhibit X X, by reason of its construction throughout its tapering part D, permits an adjustment of the forward upper portion of such

part D in both a horizontal and purpendicular direction. The horizontal adjustment is important because of the fact that the friction of pressure upon the two edged of the paper strip or wrapper can be equalized by the adjustment of the forward up-er partion of the tube X X in a horizontal direction, as the case may be, to accomplish this work, while in the tube Exhibit X, by reason of its construction, this horizontal and perpendicular adjustment is precluded, and if any change whatever is to be made in either direction as to the relative position of the parts an entire reconstruction of the tapering part D of Exhibit X must take place. Another advantage arising from the construction of the tube Exhibit X X is that where an undue quantity of tobacco, as, for instance, a lump, enters the tapering part D it can force apart the two portions of such tapering part of the tube to a certain degree and relcave the strain upon the belt by means of which the wrapper and filler are conveyed through the tube, and thus lessen the liability of breaking or damaging such belt or ribbon, while the tube Exhibit X does not permit of any such movement of its parts relatively to each other, so as — relcave the belt or ribbon under the circumstances just stated.

The capacity of the tube Exhibit X X to permit of the two adjustments and movement of the parts as just stated is, as I understand the matter, a very important feature in the practical operation of cigarette machines using such tubes, and, as before stated, is not possessed by Exhibit X.

Defendant's counsel offers in evidence the tube referred to in the last answer, and the same is marked "Defendant's Exhibit Newberry Illustrative Model, August 30th, 1890."

9 Q. State whether you have read Complainant's Exhibits B and C, the same being letters patent granted to James A. Bonsack, No. 238,640, dated March 8th, 1881, and No. 247,795, dated October 4th, 1881, and do you understand construction and operation of the cigarette wrapping tubes therein described.

Ans. I have frequently read and studied printed Patent Office copies of the patents named in the question, and beleive that I understand the construction and operation of the mechanism therein shown and described.

10 Q. Compare the tube now shown you, heretofore offered in evidence and marked Exhibit X X X X, with the construction of the wrapping tube described and shown in the said Bonsack patent No. 238,640 and state whether the said Exhibit X X X X embodies the mechanical con-truction of the wrapping tube of the said Bonsack patent with substantial correctness.

A. I have made the comparison called for by the question and find that said Exhibit X X X X, aside from some slight differences as to proportions and construction, does embody with substantial correctness the mechanical construction therein shown and described. The principal difference in construction which I have referred to consists in there being no opening provided in the exhibit for the feed-wheel shown in said patent.

11 Q. Compare the wrapping tube Exhibit X, which has been

stated to substantially embody the tube described and claimed in the Pollards patent, with the tube Exhibit X X X X, which you have stated substantially embody the tube described and shown in said Bonsack patent, and point out the substantial differences and resemblances in the two exhibits.

A. I have made the comparison called for by the question and find that the tube Exhibit X X X X *is* similar to the tube Exhibit X, in that it is made up of four sections or parts, as heretofore described by me and designated as "trough part C," "tapering part
157 D," "partly cylindrical part Y," and "wholly cylindrical part E," the whole being joined into one tube adapted for use in a cigarette machine for wrapping a continuous strip of paper around the cigarette filler, which is also formed continuously.

The two tubes, Exhibit X X X X and Exhibit X, are also similar, in that each has at its right-hand side or edge a closed spiral guide which terminates in an abutment along the line of which there is a slit or opening. There is some difference in the length of this closed spiral guide in the two exhibits as well as in the abutment and slit or opening, the closed spiral guide of Exhibit X X X X being longer than the corresponding guide of Exhibit X and the slit or opening of this last-named exhibit being longer than the corresponding part in Exhibit X X X X; but these differences in length of the parts just named do not effect the operation of such parts upon the right-hand edge or pasted margin of the paper strip or wrapper, and therefore are immaterial differences and do not effect the similarity of the two exhibits, so far as the right-hand side or edge of them *are* concerned.

The two tubes, Exhibit X X X X and Exhibit X, differ from each other, in that on the left-hand side or edge of Exhibit X there is constructed a closed spiral guide throughout the length of the tapering part D, which guide is a continuation of the guide upon the left-hand side or edge of the trough part C of said tube Exhibit X. The trough part C of Exhibit X X X X is provided with a closed spiral guide which terminates at the mouth or entrance of the tapering part D of that tube at the point where the closed spiral guide of Exhibit X commences in this last-named exhibit, while Exhibit X X X X has no such closed spiral guide along and throughout the length of its tapering part D.

I desire to be understood, when referring to said Exhibit X in the present answer as well as hereafter, I will, as in the previous answer, assume that the closed spiral guide on the left hand of tube Exhibit X is unproveded with the three openings which I have heretofore referred to in which that tube differs from the tube shown and described in said Pollard patent.

12 Q. Look at a certified copy of letters patent No. 231,779, granted to Charles G. Emery on 31st of August, 1880, and state what construction of wrapping tube you find described and shown in said patent.

Objected to by counsel for complainant on the ground that any matters pertaining to the Emery patent or any comparison of the

Emery patent with those of Bonsack or Pollard is irrelavent, and such cannot be made or introduced on behalf of defendant, it being foreign to the matter at issue.

Counsel for defendant states, regarding the objection just entered, that his understanding, in view of numerous decisions of the court, — that the desc-iptions and drawings of letters patent of prior date to the patent in suit and relating to the same general subject-matter are always admissible to show the scope of the invention of the patent in the suit and are competent evidence in the suit.

A. I find in the said patent a construction of wrapping tube adapted for use in a cigarette machine to wrap a flat strip of paper continuously around a continuously formed filler, and which tube is divided into four operative sections or parts, but not all of them connected directly together, but connected indirectly through the means of the frame of the machine. These parts may be designated, as in the case of the former tubes referred to, viz., "trough part C," "tapering part D," "partly cylindrical part Y," and "wholly cylindrical part E." The trough part C of the wrapping tube which — in the said Emery patent, and which tube I will designate for convenience as the Emery tube, is joined directly to the tapering part D, which latter part is a continuation of the former.

158 The trough part C is that portion of the part designated in the said Emery patent by the figures 48 from the beginning of such part up to a point about midway of the horizontal portion of the part 48 shown in figure 8 of the drawings of said patent. The tapering part D is the balance of the part marked 48 in said patent from a point beginning where the trough part C ended up to the end of such part 48. The semi-cylindrical part of said Emery tube is that portion of the part designated in said patent by the figure 52 commencing just beyond the part, figure 51, and extending up to and adjacent to the part 62 of such patent. The wholly cylindrical part E consist- of a portion of the part 52 of such Emery patent with the part 62 of that patent. These parts and points I will hereafter mark and designate on a copy of the drawings of said Emery patent for convenience of reference.

I have also, for convenience of reference, had prepared a model of these parts, and upon which I will also mark and designate the parts and points correspondingly.

The said Emery wrapping tube has throughout the length of its trough part C and tapering part D two closed converging spiral guides, one for each edge of the paper strip which is to be formed into the cylindrical or tubular form and wrap-ed around a filler also contin-ously formed. Both these guides terminate at the same point and shown in both the drawings and the model, and at the point where they so terminate one overlaps the other, the overlap-ing one being the closed spiral guide on the right-hand side or edge of the tube. The closed spiral guide on the left-hand side or edge of this Emery tube passes below the plane of the guide upon the opposite side of the tube so as to force the left-hand edge or unpasted margin of the wrapper under the opposite or right-hand

edge or pasted margin, and thus to support and guide the two edges or margins of the paper strip or wrapper into the overlapping position heretofore referred to.

It will be noticed that the left-hand closed spiral guide of this Emery tube guides and directs the left-hand edge or unpasted margin of the paper strip or wrapper into the position relatively to the filler that it is to occupy when the pasted margin or right-hand edge of the wrapper is bro-ght down upon it.

The closed spiral guides of this Emery wrapping tube do not terminate in abutments, but stop short of an abutment arranged along the length of the partly cylindrical part Y of such tube, which also has a slit or opening along the line of said abutment, which receives and holds the right-hand edge or pasted margin of the wrapper while it receives paste from a pasting wheel suitably arranged in connection therewith. This abutment is arranged nearly horizontally of such partly cylindrical part Y. The wholly closed part E of this Emery tube consists of a leather strap and weight arranged in connection with a portion of an extension of the partly cylindrical part Y in such manner that the right-hand edge or pasted margin of the wrapper will be closed down upon the left-hand edge or unpasted margin with a gentle and yielding pressure. The specification of the said Emery patent described the rear part of the part therein designated as 52 as follows:

"The rear of the conductor 52 extends within but is not attac-ed to the forward end of the flaring or bell-mouthed conductor 61, so as to deliver the filler with the wrapper surrounding the same into said conductor."

The above is the only reference to the rear end of the part designated in the patent as 52 that I find referred to in the specification, and the drawings do not show the exact point at which 52 ends, nor do they show the exact construction of the upper part of such rear end. I have constructed the rear end of this part in the model closed so as to follow the circular form begun by the leather strap and under portion of such part 52, for if the filler with the wrapper surrounding the same be conducted into the cylindrical tube 61
159 as described such rear end of 52 would naturally be made closed as it is constructed in the model.

It will be seen upon reference to the said Emery patent that the belt or ribbon by which the cigarette rod in its finished condition is to be drawn forward does not pass through this Emery wrapping tube, but passes through another tube, viz., 61, and receives the finished cigarette rod immediately upon its leaving the rear end of this Emery wrapping tube.

It will be also noticed that the tapering part D of this Emery wrapping tube is not closed throughout its length, but that it is open more or less along such length, which must necessarily be the case owing to the fact that the two covered closed spiral guides terminate at the same point and direct or guide both edges of the paper into an overlapping position, and therefore one edge, viz., the overlapping one, must necessarily have a slit or opening through which it may pass or move into such overlapping position.

I have placed upon the said model of this Emery wrapping tube a part designated in said Emery patent as "bridge 47," whose function is to conduct or direct the tobacco forming the filler into the wrapping tube.

I desire to state that the drawings do not agree as to the exact construction of this part or bridge 47 and in some respects this description of the same part differs from the drawings, and I have had constructed the bridge 47 on the model as near as I can determine it in accordance with figure 9 of the drawings and semi-circular in cross-section, as described in the specification, although I am not clear as at just what point the rear end of this bridge 47 ends. I have assumed that the dotted lines shown in the said figure 9 indicated that it extended to the end of the closed spiral guides.

Counsel for defendant offers in evidence the patent referred to in the last question and answer, and the same is marked "Defendant's Exhibit Emery Patent, August 30th, 1890."

The same counsel also offers in evidence the illustrated model referred to by the witness in his last answer, and the same is marked "Defendant's Exhibit Emery Model, August 30th, 1890."

Adjourned for lunch.

Resumed after lunch.

13 Q. Compare the wrapping tube of Exhibit Emery Patent, as illustrated in Exhibit Emery Model, with the tube of the Pollard patent as embodied in Exhibit X and point out the differences and resemblance in their construction and operation which you may find.

A. I have made the comparison required by the question and find that the two wrapping tubes, "Exhibit X" and "Exhibit Emery Model," are alike in that each one of them is designed and is adapted for use in a cigarette machine to continuously wrap a paper strip around a continuously formed filler so as to form a wrapper for such filler with one of its edges overlapping — other. These two tubes also resemble each other in that each has four operative sections or parts, as I have heretofore described, and they also resemble each other in that they each have two converging closed spiral guides for guiding and supporting the two edges of the paper strip or wrapper into a cylindrical or tubular form, with one edge overlapping the other. They also resemble each other in that the left-hand closed spiral guide of each tube passes below the plane of the closed spiral guide upon the opposite or right-hand side or edge of the tube to guide and direct the left-hand side or edge of the wrapper under or below the orther or right-hand edge. In each case this left-hand edge or margin of the paper is guided and supported into the same relative position upon the filler—that is, the position it is finally to assume in the completed cigare-te rod. These two tubes, Exhibit X and Emery Model, also resemble each other in that each tube is provided with an abutment, along the l-ne of which there is a slit or opening which receives the
160 right-hand edge or pasted margin of the paper while it is receiving the paste. These two tubes also resemble each other in

that each has a partly cylindrical part through which the filler and unpasted margin or left-hand edge of the paper strip or wrapper pass without changing their positions relatively to each other and in which such part of the strip or wrapper is held in contact with the filler. They also resemble each other in that each has a closed cylindrical part into the entrance of which the right-hand edge or pasted margin of the paper strip or wrapper passes so as to bring the two edges of the wrapper in contact with each other and the filler and be united through the means of the paste supplied to such right-hand edge of the wrapper. These two tubes also resemble each other in that the two converging closed spiral guides are upon a tapering part or section of each tube.

The operations of the two tubes resemble each other in principle and result. In fact, I cannot point out any difference in this respect, unless it be possible a difference in degree.

The two tubes, Exhibit X and Emery Model, differ from each other in that all of the four sections are not connected directly together in the Emery model, but are connected indirectly through the frame of the machine, while in the case of the tube Exhibit X they are connected directly together. They also differ from each other in that the tapering part D of the Emery model is not closed throughout its length, as is the case in the tube Exhibit X. They also differ from each other in that the closed spiral guide on the right-hand side or edge does not terminate in an abutment as in the tube Exhibit X, but terminates short of such abutment. But this difference does not change the movement of the right-hand edge or pasted margin of the wrapper or the operation of a tube as a whole. The two tubes also differ from each other in that the abutment, along the line of which a slit or opening is formed in the Emery model, is nearly horizontal instead of being nearly perpendicular, as in the case of the tube Exhibit X, but this difference, like the one previously stated, does not change the operation of the wrapping tube of the Emery model from that of the tube Exhibit X. In each case the abutment is arranged relatively to the surface of the disc or wheel which supplies the paste to the right-hand edge or pasted margin of the tobacco, as such edge or margin is received by the slit or opening and abutment during the operation of applying the paste. The past- applying surface of the disc or wheel of the Emery model is arranged horizontally of the wrapping tube, while in the case of the said tube, Exhibit X, it would necessarily have to be arranged nearly perpendicularly to such tube in order to apply the paste thereto. The two tubes also differ from each other in that the wholly cylindrical part E of the Emery model is composed of two parts not rigidly secured to each other, while in the tube Exhibit X such parts are rig-dly connected ; but, as in the two last-named differences, the operation of the tube or the moving of the two edges or margins of the paper into contact with each other so as to be united by means of the paste applied to the overlapping edge or margin is not altered or changed by such difference to any material extent.

The two exhibits, Emery Model and Tube X, also differ from each

other in respect to the extent to which the bridge or filler-guiding device is designed *of* enter such wrapping tubes.

It will be noticed that between the beginning of the partly cylindrical part Y of the Emery model and the termination of the closed spiral guide upon the left-hand side or edge of the Emery wrapping tube there is arranged a thin elastic finger to press with a yielding pressure the top surface of the left-hand edge or unpasted margin of the paper, and also to keep the two edges or margins of the wrapper separated, while no such finger is found upon the tube Exhibit X; but I think that it is manifest that this finger of the Emery model may be considered a continuation of that portion of the en-

161 trance to said partly cylindrical part which receives the left-hand edge or margin of the wrapper, for it simply keeps such edge or margin in position, to be readily received by such partly cylindrical part Y.

14 Q. Refer to the statement in the preliminary portion of the specification of the Pollard patent, where the patentee refers to certain defects in the wrapping tubes used on machines prior to the date of the Pollard patent, and state whether the defects therein pointed out would be present and become operative in the use of the wrapping tube of the Exhibit Emery Patent, and illustrated in Exhibit Emery Model, and state your reasons for any opinion you may express.

A. The difficulties referred to in that portion of the specification of the Pollard patent named in the question would not exist or be operative in the wrapping tube of the said Exhibit Emery Patent, and my reasons for so stating are as follows:

In the said Emery tube there are two converging closed spiral guides—one for each edge or margin of the paper—in which such edges or margins are supported and guided, so the friction or pressure upon such margin is substantially equal, as such edges or margins move spirally, and, consequently, from the flat to the tubular overlapping form or condition, and therefore there would be no tendency for one edge to become crumpled or wrinkled or to be bent back or torn, as stated in such part of the specification.

15 Q. State what, if anything, in view of the prior state of the art relating to wrapping tubes for cigarettes, as set forth in the exhibits Bonsack and Emery patents, did Pollard have to do in order to construct the tube described and claimed in the Exhibit Pollard Patent and embodied in the tube Exhibit X.

A. He had substantially nothing to do so far as remedying the defects pointed out in said Pollard patent is concerned. The most that can be said that he did was to transfer the closed spiral guide from the left-hand side or edge of the said Emery tube to the corresponding side or edge of the Bonsack tube, so that it would do precisely the same work in precisely the same way that the said left-hand guide did in the position before being transferred, and a mere inspection of the said Emery patent would have disclosed the fact that when this transfer was made so as to do its work as it did before the said left-hand closed spiral guide would pass below the plane of the guide at the oppo-ite or right-hand side of such Bon-

sack tube, and also that it would extend up to and in front of a slit or opening formed along the line of the abutment of the said Bonsack tube, and that it could not be made to do otherwise, unless it was made to do its work differently in the transferred position from what it did when in the said Emery tube before the transfer was made.

16 Q. Have you read the deposition of Virgil D. Stockbridge, taken on behalf of complainant in this suit on the 13th of March, 1890?

A. I have.

17 Q. In his answer to the third question in said deposition, referring to the specification and claims of the said Pollard patent, the said Stockbridge states, in reference to the converging guides of the Pollard tube, as follows:

"One guide terminating in (having) an abutment to hold one edge of the paper and the other guide passing or extending in front of and up to the beginning of a cylindrical part of the tube designated in the specification as a slit."

Do you understand that this is correct description of the construction of the tube of the Pollard patent? And give any reasons you may have for your answer.

A. No; I do not; for, as I understand this statement of Mr. Stockbridge, he has, by placing the word "having" in such statement as apparently synonymous with "terminating in," conveyed the
162 idea that the guide was to have an abutment which would emply that the guide at the right-hand side or edge of the wrapping tube of the Pollard patent extended beyond the point where the specification says it terminates. There is not the slightest suggestion anywhere in the specification of said Pollard patent that I can find which would warrant any such idea of the extent of such right-hand guide. The only "slit" that I find referred to in the specification of said Pollard patent is one coextensive in length with that of the abutment formed beyond the guide on the right-hand side of such tube and in which said guide is described as terminating, and it extends along the whole length of the partly cylindrical part of such tube. It is true that the left-hand closed spiral guide ends at the beginning or entrance to this partly cylindrical part of the Pollard tube, but this left-hand guide is described in the patent as extending in front of and up to a slit formed along the line of the abutment upon the opposite or right-hand side of the tube, and there is no reference whatever in said patent which, as I understand the matter, would warrant the statement made by Mr. Stockbridge named in the question.

18 Q. The witness Stockbridge, in answer to the 4th question, referring to the operation of the tube of the Bonsack patent, states that after the paper strip and tobacco roll have entered the tapering tube the curving and wrapping of the paper around the roll proceed on one side only, &c. State whether this assertion of the witness Stockbridge is in accordance with the actual operation in the respect named.

A. If he meant that this was the normal operation of the wrap-

ping tube of the Bonsack patent, I do not agree with him, for it would be an impossibility to ever bring the two edges into an overlapping condition, and it was because the wrapping of the paper around the filler proceeded spirally at both sides at the same time that there was difficulty experienced in that tube, and that difficulty was brought about by the friction of the roll of tobacco or filler upon the left-hand edge of the paper, which interfered with such edge, moving spirally or being wrapped spirally around such filler, so that this spiral movement was more or less imperfect and produced the wrinkling or crumpling in proportion to the extent with which the spiral wrapping of that edge of the wrapper was interfered with.

It is an impossibility to have an overlapping seam extended longitudinally of the cigarette rod if the spiral movement of the paper forming such wrapper takes place on one side only, for if it did so take place that edge would have to travel a great deal faster than the other, and this would bring the seam in a spiral direction around the rod; therefore I am clearly of the opinion stated at the beginning of this answer.

19 Q. In further answer to the said fourth question, and also referring to the operation of the said Bonsack tube, witness Stockbridge states in substance that the paper strips must be wider than the belt by the distance of the lap in the cigarette, "whereas in the Pollard patent there is no such requirement according to the illustration in said patent." Please state what your understanding is of the statement made by the said witness.

A. By referring to the drawings of the Pollard patent, I find in pages 1 and 3 that there is a belt shown as running or passing through the tube in Fig. 1 and a roll which I understand to indicate a roll of paper, one end of which passes into such tube and is in that figure designated by the letter H. Now, in Fig. 3, which is partly in perspective, I see what is apparently the same belt and same strip of paper entering the tube, and the belt is of considerable less width than the strip of paper and to an extent at least equal to the overlap of the paper wrapper.

The slightest knowledge or consideration of the subject would show that with a belt passing through a wrapping tube, as
163 shown in figure 1 of the drawing of the said Pollard patent, there must necessarily be a difference in the width of the belt and the paper strip of at least the amount of the overlap of the wrapper, unless some special means were shown to remove the belt from the tube before it reached the point where the pasted margin is brought in contact with the unpasted margin, for if it were not so removed the edge of the belt would be interposed between the two margins of the paper and the overlapping edge of the paper would be pasted upon the belt instead of upon the underlapping edge, as it should be. No such means as above indicated are shown or in any way referred to in the said Pollard patent.

20 Q. The witness Stockbridge also says in the same answer, speaking of the guides of the tube of the Pollard patent: "These

guides, though convergent, are straight." State whether this is a correct statement regarding the guides of the Pollard tube.

A. It is not a correct statement, as is clearly proven, I think, by an inspection of the drawings of said patent, which show these guides as being spiral guides as well as converging guides; and if the guides of the Pollard patent are to perform the functions described in the specifications of that patent they must necessarily be both spiral and converging.

21 Q. In the closing paragraph of his answer aanswer to the 7th question the witness Stockbridge states as his conclusion, as I understand his language, that it makes no difference whether the left-hand guide designated by *d'* of the Pollard tube is a closed guide or whether there is an open space or slot left between the edge of the tapering portion D and the wall of the tube, which runs alongside of such tapered portion. Do you agree with Mr. Stockbridge in his said conclusion? And briefly give reasons for your answer.

A. I do not agree with Mr. Stockbridge, for if the guide designated *d'* of the Pollard tube was to be left open and not closed, as shown and described in the said Pollard patent, then such guide would be no longer capable of doing the work or performing the function ascribed to it in said patent, and other and different means would have to be supplied and which would operate differently to perform the function or to do the work of the said guide *d'*. In other words, you would entirely destroy such guide and render it useless; and, because it would be so destroyed, I think it is manifest that it is very material that it should be closed or housed as described in said Pollard patent, and that such destruction of said guide *d'* is not immaterial as stated by Mr. Stockbridge.

22 Q. The witness Stockbridge, in answer to the 11th question, states that "the only visible difference is opposite the trough portion," in his comparison of the Exhibit X X with the tube of the Pollard patent, and he also states that the tube Exhibit X X, as a whole, operates "on the same principle as that described in the claim in the Pollard patent and contains or embraces all the elements and functions of said patent." Do you agree with this statement and conclusion?

A. The visible difference opposite the trough portion of the two tubes refers to the point at which the belt or ribbon which is to conduct or carry the paper strip or wrapper and filler through the tube enters in the tube X X further from its beginning than is the case in the tube of the Pollard patent. This difference, I am of opinion, is an immaterial one when considering the operation or functions of the two tubes, for in each case the paper and filler is carried in precisely the same way and by the same means. I do not agree with Mr. Stockbridge, with the latter-quoted statement of the question, for, as I have heretofore stated, that the two tubes he is therein comparing operate differently and by different means, and that the left-hand edge or unpasted margin of the paper is acted upon in the tube Exhibit X X by means which operate upon
164 a different principle from what the corresponding edge of the paper strip or wrapper is acted upon in the case of the tube

of the Pollard patent. It is true that the same result, viz., the production of a wrapped cigarette rod, is produced with each tube, but the means employed to accomplish this result differ, as before stated, both in construction and operation or function; and, because of this, I cannot agree with Mr. Stockbridge, as I have already stated in this answer. I would state, however, that the most casual inspection of the tubes under comparison by Mr. Stockbridge discloses the fact that there is a very material visible dif-erence in the two tubes, viz., the closed spiral guide *d'* which is constructed along the whole length of the tapering part D of the Pollard tube, while in the case of the tube Exhibit X X there is no such spiral guide. How the absence of this guide *d'* of the tube Exhibit X X escaped Mr. Stockbridge's attention is almost beyond my power of explanation.

Counsel for defendant offers in evidence a certified copy of the file wrapper and contents in the matter of letters patent granted Edward T. Pollard July 22, 1884, and numbered 302,521, and the same is hereby marked "Defendant's Exhibit File Wrapper and Contents of Pollard Patent," August 30, 1890.

Cross-examination by J. H. WEBB PEPLOE, Esq., of counsel for complainant:

23 X Q. Have you ever seen the Bonsack machines in operation?

A. I have.

24 X Q. Is any other make of cigarette machines now used and operated, of your own knowledge, upon the principle of the tube?

A. Understanding the question to mean cigarette machines in which a paper strip is taken in its flat condition and continuously and spirally formed into the cylindrical or tubular overlapping condition and wrapped around a continuously formed cigarette by means of being passed through mechanism for performing this work, I would answer yes; there is.

25 X Q. Please state the name of the machine.

A. The machines were in operation at the factory known as Goodwin & Co., in this city, and I believe they are known by the name of the Emery machines.

26 X Q. Please read your answer to question 8, on page 42, relating to the expansion of the tube when an unusual large mass of tobacco enters it, and state whether that portion of your answer is made from actual knowledge or hearsay or surmises.

A. I hardly know just what counsel means by the three last words of the question, but I will state that it is based upon an actual movements of the parts in the tubes like Exhibit X X and also upon testimony in this case.

27 X Q. Can you, as an expert, discover no further difference in principle between the Emery and Pollard tubes than you have stated in your answer to question 15, judging by models and specifications already filed in this case?

A. If counsel will state what he means by principle, so that I may definitely know to what to direct my answer, I will be pleased to

answer his question, but in its present shape it is altogether too indefinite.

28 X Q. You were asked in said question to describe what, if any, was the nature and extent of Pollard's invention when compared with that of the prior patent granted to Emery. You then enumerated certain points of similarity and dissimilarity, and I ask you whether you have been able, as an expert, to discover no further difference in the principle of the two tubes than those enumerated by you in your answer.

A. I am unable to get any such understanding of said 15th question as is stated in the present as being therein contained. The said question is in the following words: "State what, if anything, in view of the prior state of the art relating to wrapping tubes for cigarettes, as set forth in Exhibits Bonsack and Emery Patents, did Pollard have to *have to* do in order to construct the tube described and claimed in the Exhibit Pollard Patent and embodied in the tube Exhibit X."

The said question as just stated does not, as I understand language, ask me anything of the purport stated in the present question, and my answer to such question was substantially contained in the first four lines of my answer to it, which five lines are in the following words: "He had substantially nothing to do so far as remedying the defects pointed out in the said Pollard patent."

I then went on and stated just what he would have to do, in view of the two patents named in said question, in order mechanically to produce the tubes of the Pollard patent, and did not therein answer any such question as indicated in the present question, and therefore I do not know just what counsel refers to, *as* again request that he will put his question into such definite *sahpe* that it will be read and understood and be definitely answered.

HERY F. NEWBERRY.

Examination of Mr. Newberry closed.

I, William T. Tawham, notary public and special examiner, by consent herein, do hereby certify that on the 29th and 30th of August, 1890, I attended at the office of R. H. Duncan, Esqr., counsel for defendant herein, at which times Henry F. Newberry appeared before me and, having been by me duly sworn, gave his testimony herein, which was reduced to writing by me and subscribed by said witness in my presence.

I further certify that I am not of counsel or attorney for either of the parties herein nor related to any one connected therewith either by blood or marriage nor in anywise interested in the result thereof.

New York, September 15th, 1890.

WILLIAM T. TAWHAM,
Special Examiner by Consent and Notary Public.

166 (2—175.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the records of this office of the letters patent granted Charles G. Emery August 31, 1880, number 231,779 for improvement in cigarette machines.

In testimony whereof I, Rob't J. Fisher, acting Commissioner of Patents, have caused the seal of the Patent Office to be affixed this 26th day of August, in the year of our Lord one thousand eight hundred and ninety, and of the Independence of the United States the one hundred and fifteenth.

Seal Patent Office United States of America.

ROBERT J. FISHER,
Acting Commissioner.

167 (2–155.)

No. 231,779.

THE UNITED STATES OF AMERICA.

To all to whom these presents shall come:

Whereas Charles G. Emery and William H. Emery, of Brooklyn, New York, have presented to the Commissioner of Patents a petition praying for the grant of letters patent for an alleged new and useful improvement in cigarette machines, said William H. Emery having assigned his right, title, and interest in said improvement to said Charles G. Emery, a description of which invention is contained in the specification, of which a copy is hereunto annexed and made a part hereof, and have complied with the various requirements of law in such case made and provided; and

Whereas upon due examination made the said claimants are adjudged to be justly entitled to a patent under the law:

Now, therefore, these letters patent are to grant unto the said Charles G. Emery, his heirs or assigns, for the term of seventeen years from the thirty-first day of August, one thousand eight hundred and eighty, the exclusive right to make, use, and vend the said invention throughout the United States and the Territories thereof.

In testimony whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed, at the city of Washington, this thirty-first day of August, in the year of our Lord one thousand eight hundred and eighty, and of the Independence of the United States of America the one hundred and fifth.

Seal Patent Office, United States of America.

A. BELL,
Acting Secretary of the Interior.

Countersigned:
E. M. MARBLE,
Commissioner of Patents.

CHARLES G. EMERY and WILLIAM H. EMERY, of Brooklyn, New York; said Wm. H. Emery, assignor to said Chas. G. Emery.

Cigarette-Machine.

Specification forming part of Letters Patent No. 231,779, dated August 31, 1880; application filed May 5, 1880. (No model.)

To all whom it may concern:

Be it known that we, Charles G. Emery and William H. Emery, citizens of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful improvements in cigarette-machines, of which the following is a specification.

This invention relates to certain improvements upon the invention forming the subject-matter of letters patent of the United States granted to us the 3d day of June, 1879, No. 216,164, for improvement in cigarette-machines, in which loose tobacco is formed into a continuous filler and a continuous inclosing-wrapper applied around said filler and the overlapping edges of the same coated with cement, forming a continuous cigarette, which is fed forward and cut into suitable lengths by an automatically-operating machine.

The main features of said machine consist of a hopper for containing and delivering tobacco; a traveling belt for receiving tobacco from said hopper; a belt curver or filler-chamber, whereby the belt is curved partially around the tobacco; a pressure-roller for packing the tobacco in the curved belt; a "filler-forming" tube for closing the belt around the tobacco; a device for opening out the belt after the filler is formed to release said filler; a bridge for supporting the filler as it is carried forward; a guide for conveying a continuous wrapper to the machine; a forming chamber by means of which the wrapper is curved around the filler; a pasting device for applying cement to one edge of the wrapper; a chamber through which the endless traveling belt and the filler with the inclosing-wrapper pass to unite the pasted edges and carry the cigarette forward; a conductor for guiding the cigarette forward; and, finally, a cutting device for severing the cigarette into suitable lengths.

It is essential in such a machine that the filler-carrying belt shall be properly curved around the tobacco at the first stages of the operation, and that the various operating parts should work in unison, or in such relation with each other as to advance the continuous filler and wrapper and feed the cigarette to the cutter at uniform speed to prevent the continuity of the filler and cigarette from being destroyed while passing through the machine and sever the cigarette into uniform and equal lengths. It is also of the utmost importance, in order to produce a marketable article, that when cigarettes leave the machine the wrappers should be in pure unsoiled condition without any tobacco or other stains.

The object of the present invention is to insure the proper curving of the belt and a perfect unison of the movements of the various parts, as well as to simplify the construction and operation of the apparatus and to prevent the wrapper from becoming soiled by any possibility.

To this end the invention consists, first, in the combination, with the traveling filler-carrier belt of a cigarette-machine, of a longitudinal trough or guide extending under the hopper and forward to the compressing-roller, the said trough or guide being semi-elliptical in cross-section, or approximating thereto, whereby the belt is caused to assume a similar form to receive the tobacco, give it its initial form, and carry it forward without waste; second, in the combination, with the traveling belt and the trough or guide, of a pressure-roller having an angular or curved groove at its periphery and an adjustable pulley, the two carrying an endless belt moving positively and in unison with the filler-carrier belt and traveling a short distance above and in contact with the filler to curve the upper part and assist in feeding and compressing the same; third, in the combination, with the feed-pulleys, their endless belt, and the filler-carrier belt, of two small pressure-rollers located in advance of said feed-pulleys and belt, to compress the filler so that it will enter the filler-forming conductor; fourth, in the combination, with the trough or guide, the traveling belt, and the compressing and feed mechanism, of a filler-forming conductor through which the belt and filler are passed, whereby the filler is completely formed and fed forward; fifth, in the combination, with the mechanism for feeding and forming the cigarette-filler, of a curved conducting-bridge leading from the filler-forming conductor over the aperture through
176½ which the belt passes from the table into the paper-guide and to the end of the same, so as to deliver the filler into the wrapper as it is formed and prevent any particles escaping over the edges of the wrapper; sixth, in the combination, with the mechanism for forming and feeding the filler, of a paper-guide consisting of a flat strip of metal with guide-folds at the edges of its lower portion and gradually contracted into conical shape at its upper end, the said guide being bent at an angle and extended below through an aperture in the table, and adapted to receive a strip of paper from a reel below or other suitable carrier; seventh, in the combination, in a cigarette-machine, of the filler-forming mechanism and filler-carrier belt with suitable wrapper-forming mechanism and an independent cigarette-carrier belt, whereby all danger of soiling the wrapper of the cigarette during its formation is obviated; eighth, in the combination, with the filler-forming mechanism, the cigarette-carrier belt, and pasting mechanism, of a flexible smoother or buff adapted to press the edges of the wrapper together with a gentle yielding pressure to smooth out the wrapper and secure the edges; ninth, in the combination, with mechanism for forming and feeding the filler and the conductor through which the filler and wrapper pass during the operation of pasting, of an endless traveling belt and a guide-tube through which said belt passes, whereby the wrapper is secured around the filler to complete the continuous

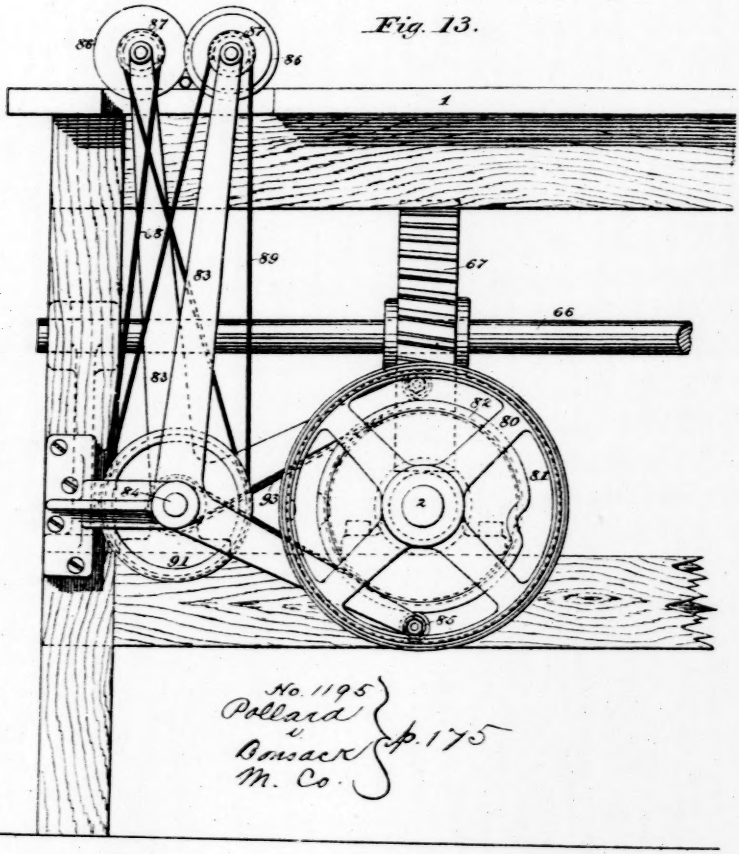
(No Model.) 8 Sheets—Sheet 8.

C. G. & W. H. EMERY.

Cigarette Machine.

No. 231,779. Patented Aug. 31, 1880.

Fig. 13.



No. 1195
Pollard
v
Ossack
M. Co.
p. 175

Witnesses:
Jas. E. Hutchinson
J. A. Rutherford

Inventors:
Chas. G. & Wm. H. Emery,
By James L. Norris
Attorney

(No Model.) 8 Sheets—Sheet 7.

C. G. & W. H. EMERY.

Cigarette Machine.

No. 231,779. Patented Aug. 31, 1880.

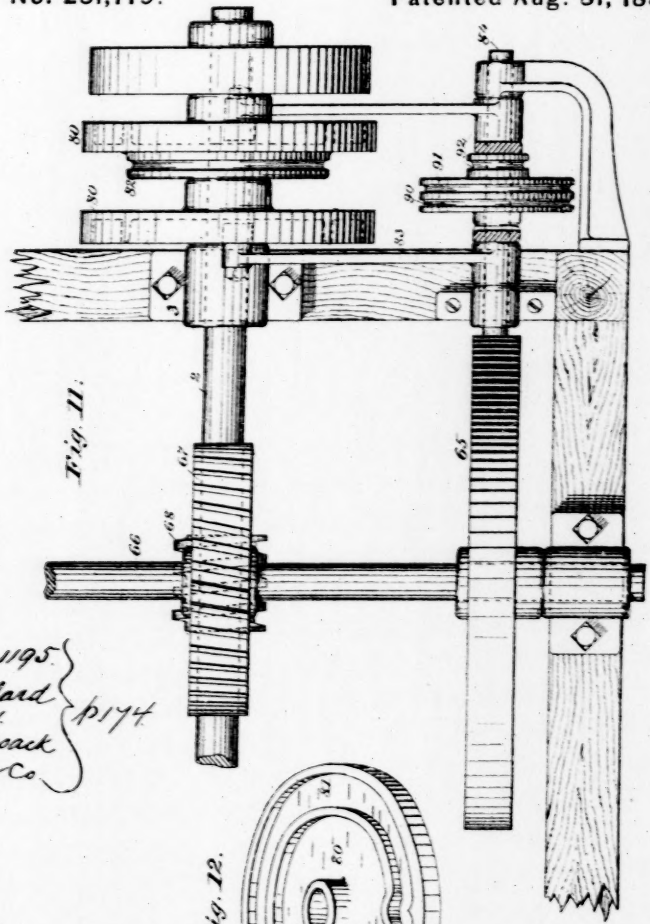


Fig. 11.

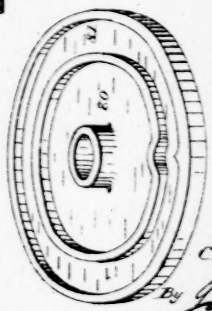


Fig. 12.

No. 1195
Pollard
v.
Domack
M'f'g Co
p. 174

Witnesses:
Jas. E. Hutchinson
J. A. Rutherford

Inventors:
Chas. G. & Wm. H. Emery,
By James L. Norris.
Attorney.

No. 1195. Pollard v. Bonsack M. Co. } p. 173.

(No Model.) 8 Sheets—Sheet 6.

C. G. & W. H. EMERY.

Cigarette Machine.

No. 231,779. Patented Aug. 31, 1880.

Fig. 10.

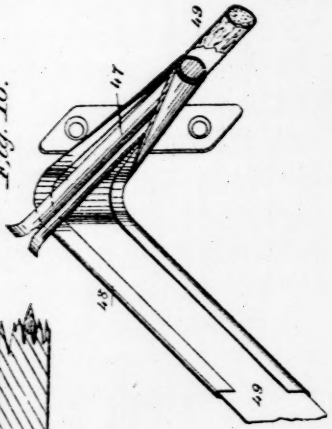


Fig. 10a.



Fig. 8.

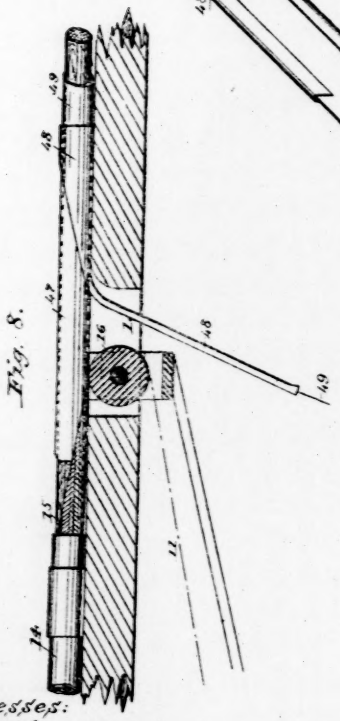
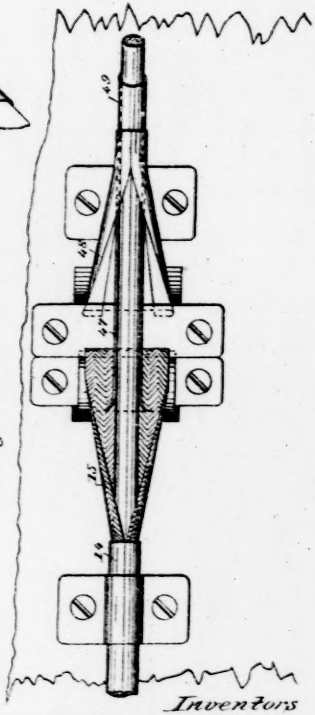


Fig. 9.



Witnesses:
Jas. E. Hutchinson.
J. A. Rutherford

Inventors
Chas. G. & Wm. H. Emery.
By James L. Norris.
Attorney.

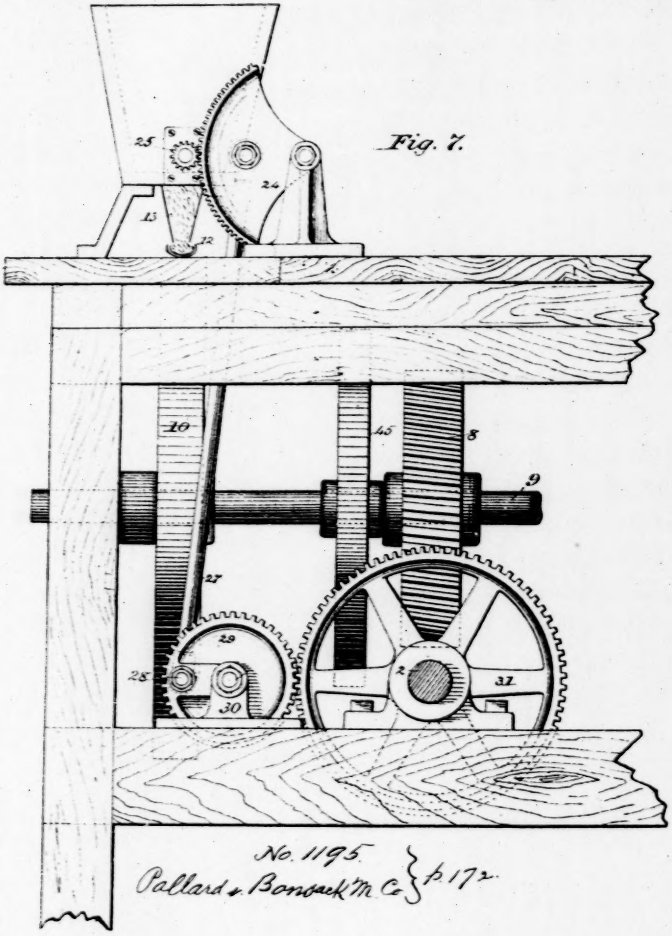
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C. G. & W. H. EMERY.

Cigarette Machine.

No. 231,779. Patented Aug. 31, 1880.

Fig. 7.



No. 1195
Pollard & Bonsack Mf'g Co. } p. 172.

Witnesses:
Jas. E. Hutchinson.
J. A. Rutherford

Inventors:
Chas. G. & Wm. H. Emery,
By James L. Norris.
Attorney

(No Model.) 8 Sheets—Sheet 4.

C. G. & W. H. EMERY.

Cigarette Machine.

No. 231,779. Patented Aug. 31, 1880.

No. 1195. Pollard & Bonsack Machine Co. p. 171

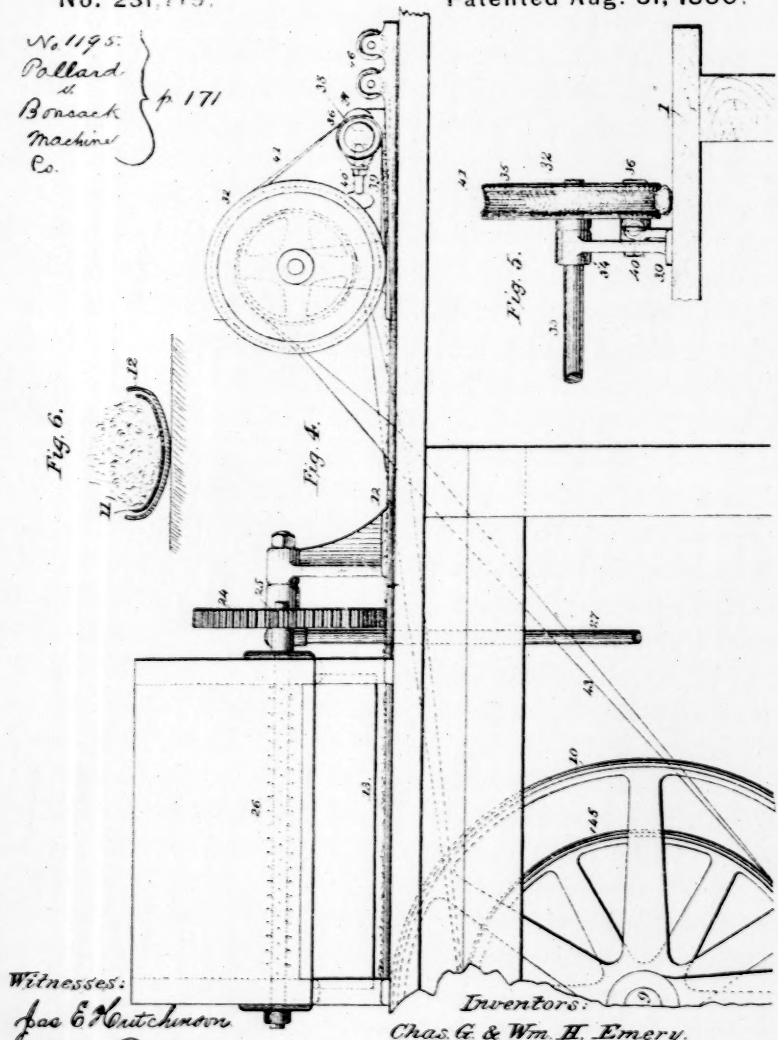


Fig. 5.

Fig. 6.

Fig. 4.

Witnesses:
Jas. E. Hutchinson
J. A. Rutherford

Inventors:
Chas. G. & Wm. H. Emery.
By James L. Norris.
Attorney.

170

(No Model.) 8 Sheets—Sheet 3.

C. G. & W. H. EMERY.

Cigarette Machine.

No. 231,779. Patented Aug. 31, 1880.

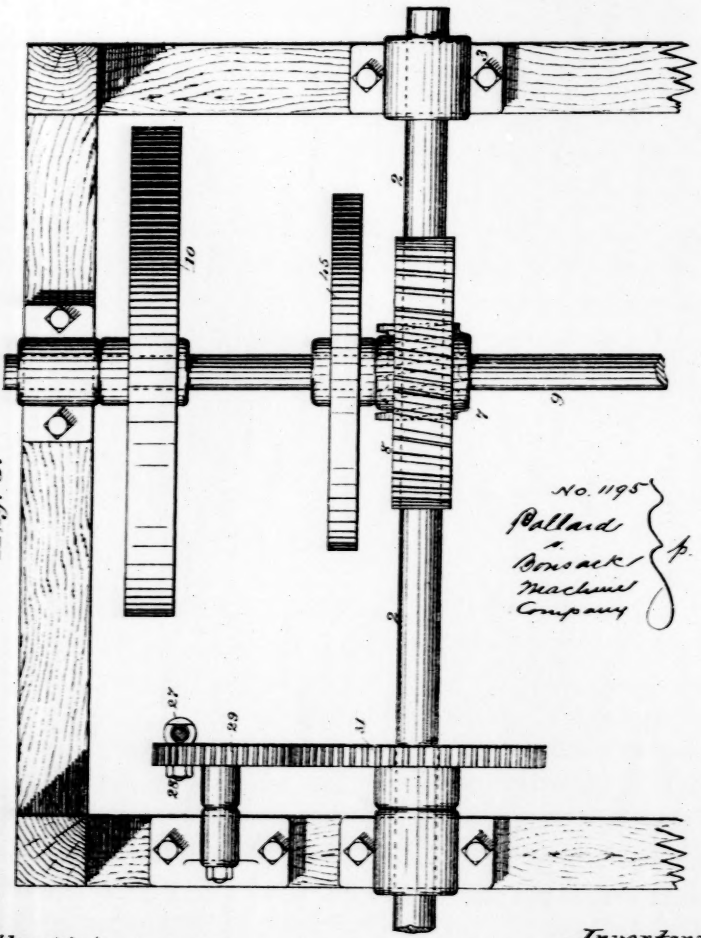


Fig. 3.

No. 1195
Ballard
Bonsack
Machine
Company
p. 170

Witnesses:
Jas. E. Hutchinson.
J. A. Rutherford

Inventors:
Chas. G. & Wm. H. Emery
By James L. Norris
Attorney.

No. 1195
Pollard v. Bonsack M. Co. Exp. p. 169.

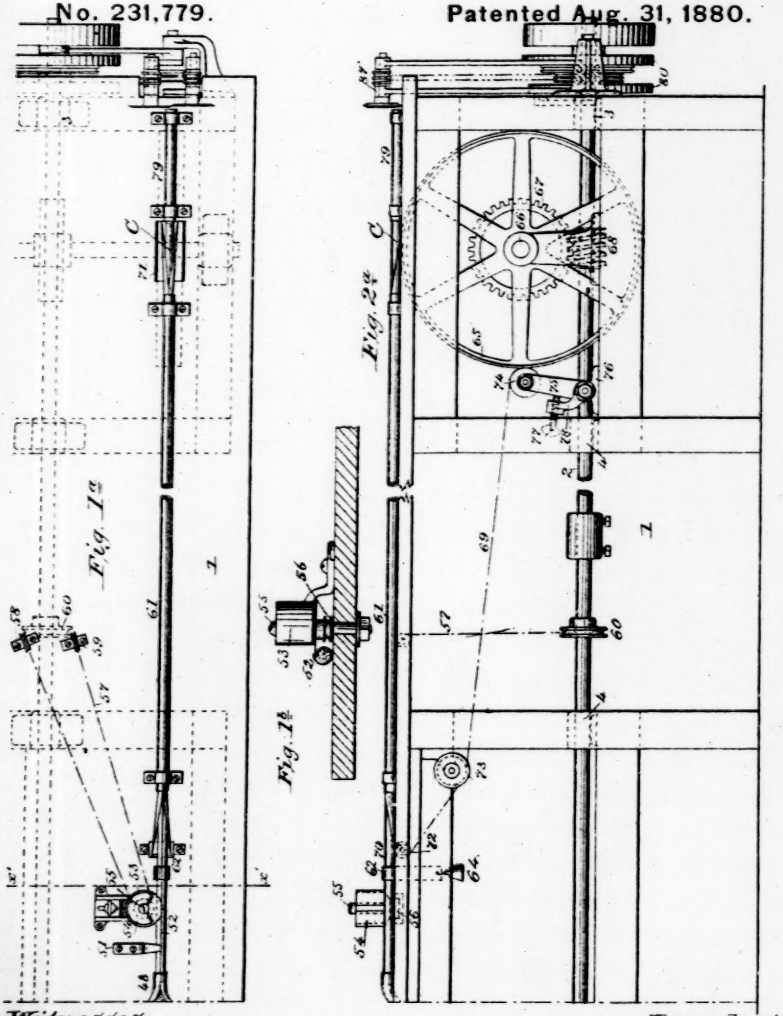
169

(No Model.) 8 Sheets—Sheet 2.

C. G. & W. H. EMERY.

Cigarette Machine.

No. 231,779. Patented Aug. 31, 1880.



Witnesses:
Jas. E. Hutchinson
J. A. Rutherford

Inventors:
Chas. G. & Wm. H. Emery.
By James L. Norris.
Attorney.

No 1195
Pollard v. Bonsack machine Co. } p. 168.

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(No Model.) 8 Sheets—Sheet 1.

C. G. & W. H. EMERY.

Cigarette Machine.

No. 231,779. Patented Aug. 31, 1880.

Fig. 1.

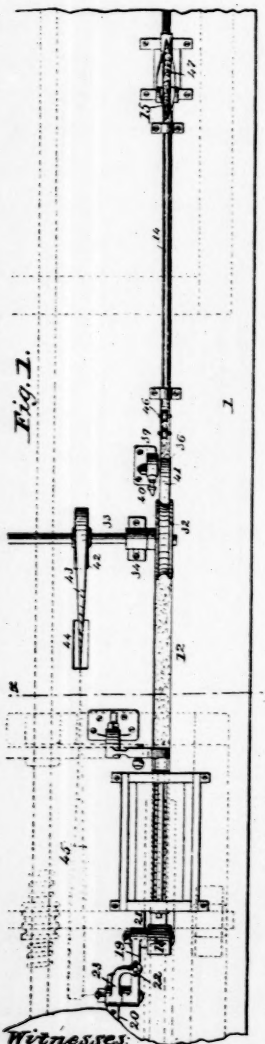
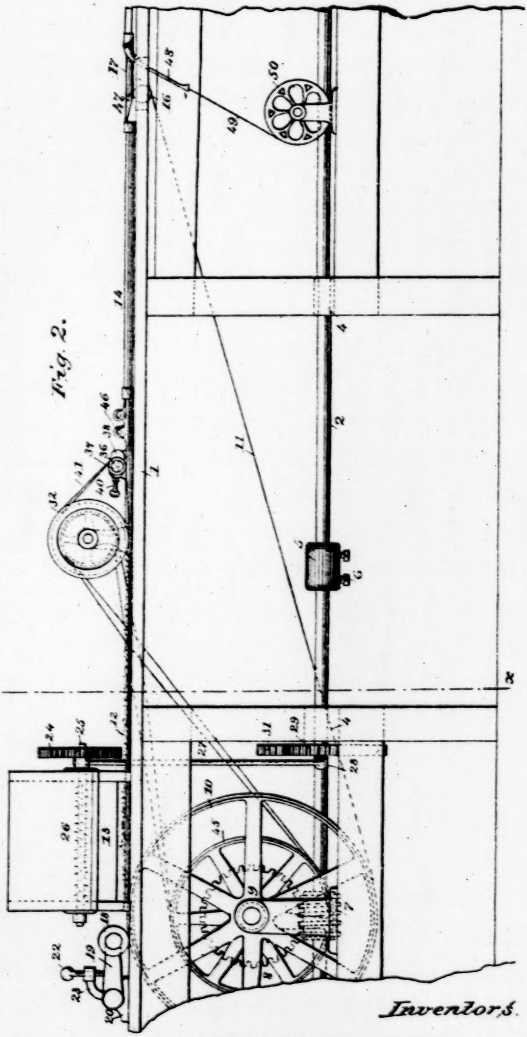


Fig. 2.



Witnesses:
Jas. E. Hutchinson.
J. A. Rutherford

Inventors.
Chas. G. & Wm. H. Emery,
By James L. Norris.
Attorney.

cigarette and said cigarette is fed forward; tenth, in the combination, with the driving-pulleys of the respective carrying-belts, of a longitudinal shaft journaled in bearings at the ends of the frame and provided with worm-gears meshing with cogged wheels on the shafts of the respective driving-pulleys, whereby a positive motion is imparted to each and they are caused to move in perfect unison; eleventh, in the combination, with the driving-pulleys of the respective carrying-belts, of a longitudinal shaft constructed in two parts, having an adjustable connection, and the gearing connecting said shaft with the shafts of the pulleys, whereby the mechanism may be adjusted to move the pulleys in proper unison; twelfth, in the combination, with the longitudinal shaft, of a cog-wheel mounted thereon and an intermeshing cog-wheel journaled in suitable bearings and provided with a pitman connected with the segment which operates the distributer in the hopper, whereby a positive motion is given to the distributer in unison with the other parts of the apparatus, in order to insure a uniform distribution of tobacco upon the filler-carrier belt; thirteenth, in the combination, with the longitudinal shaft, of two wheels provided with cam-grooves, and two angle-levers pivoted to the frame of the table and carrying at their upper ends rotary cutters, the lower ends being provided with friction-rollers setting in the cam-grooves, whereby the cutters are operated to sever the cigarette into proper and uniform lengths; fourteenth, in the combination, with the longitudinal shaft, of a grooved pulley mounted thereon, with a pulley mounted on the shaft to which the angle-levers are pivoted, and provided with three grooves and suitable grooved pulleys mounted on the cutter-shafts, the system of pulleys being connected by means of endless bands, whereby a rapid rotary motion is imparted to the cutters when the machine is in operation, in order to give a clean cut to the cigarette.

(Here follow diagrams marked pp. 168 to 175, incl.)

In the drawings, figures 1, sheet 1, and 1^a, sheet 2, represent top views of our improved machine, portions of the machine being represented by dotted lines. Fig. 1^b is a section on line $x'\ x'$. Figs. 2, sheet 1, and 2^a, sheet 2, represent a side elevation with portions in dotted lines. Fig. 3 represents an enlarged top view of the forward portion of the table with the top of the same removed, showing the longitudinal or main driving-shaft, the shaft carrying the driving-pulley of the filler-carrying belt with the mechanism for operating the same, and the segment which operates the distributing mechanism of the hopper. Fig. 4 represents an enlarged view, in side elevation, of the forward portion of the machine, showing the hopper, distributing mechanism, trough, and feed and compressing mechanism. Fig. 5 represents a detached front view of the feed and compressing mechanism. Fig. 6 represents a detached view, in cross-section, of the top of the table, showing the trough or guide and the filler-carrying belt with the tobacco distributed therein from the hopper. Fig. 7 represents an enlarged view, in transverse

section, on the line $x\,x$ of Figs. 1 and 2. Fig. 8 represents an enlarged longitudinal sectional view of that portion of the table through which the filler-carrier belt passes after forming the filler, showing the paper guide and bridge for conveying the filler into said guide. Fig. 9 is an enlarged top view of the table and last-mentioned parts. Fig. 10 represents a detached perspective view of the paper-guide and conveying-bridge enlarged. Fig. 10^a indicates a transverse sectional view, showing the flexible buff-smoother. Fig. 11 represents an enlarged top view of the rear portion of the machine with the top of the table removed, showing a portion of the mechanism for operating the cigarette-carrier belt and a portion of the mechanism for operating the revolving cutters. Fig. 12 represents a detached perspective view of one of the cam-grooved wheels by which the angle-levers carrying the rotary cutters are operated; and Fig. 13 represents a rear elevation of the machine, showing the mechanism for operating the cutters.

The number 1 indicates a table constructed of any suitable material, and carrying the working parts of our improved apparatus; and 2 indicates a longitudinal main driving-shaft journaled in bearings 3 (shown in Figs. 2^a, 3, and 11) in the frame of the table at each end of the same, and in intermediate journals, 4.
177 The said shaft is preferably constructed in two parts, which are provided with an adjustable connection, 5, having binding-screws 6, for the purpose more fully hereinafter specified. No. 7 indicates a worm mounted on the main driving-shaft 2 near its forward end, and gearing into a wheel, 8, provided with oblique cogs on its periphery. The said wheel is mounted on the tranverse shaft 9, carrying the large driving-pulley 10, which gives motion to the filler-carrier belt 11.

The number 12 indicates the trough or filler-belt guide, which is semi-elliptical in cross-section, as indicated in Fig. 6, and is located upon the table, extending from its front or near the same longitudinally under the delivery-spout 13 of the hopper, and from thence forward upon the frame, until it passes the feed and pressure roller, more fully hereinafter described, where it is gradually contracted, connecting at its contracted end with a filler-forming conductor, 14. The filler-carrier belt extends forward through the trough, being curved by the same to correspond with its outline in cross-section, and is gradually contracted and passed through the filler-forming conductor 14, which opens out laterally at its delivery end 15, so as to permit the belt to expand laterally and flatten itself out as it emerges from said conductor.

The number 16 indicates a transverse roller journaled in an opening, 17, in the top of the table, over which the filler-carrier belt passes on its return to the driving pulley.

The number 18 indicates a roller mounted at the end of a bent lever, 19, which is pivoted to a bearing, 20, secured to the top of the table at one side of the forward opening, 21, through which the filler-belt passes on its forward course.

The number 22 indicates a set-screw mounted in a bracket, 23, by means of which the roller may be pressed upon the belt 11 to

force it into contact with the pulley 10 and insure its movement without possibility of slipping.

The number 24 indicates the cog-segment which gives motion to the pinion 25 of the distributer 26 in the hopper. This segment and pinion are the same as described in the original patent granted to us, before mentioned. To the segment is pivoted a connecting-rod, 27, extending through an opening in the table below and connecting at its lower end with a crank-pin, 28, on the cog-wheel 29, which is journaled to a standard, 30, on the frame of the machine.

The number 31 indicates a cog driving-wheel intermeshing with the wheel 29 and journaled on the main driving-shaft, by means of which an intermittent movement is given to the segment 24, and through it to the distributer, to distribute the tobacco upon the filler-carrier belt.

The number 32 indicates a roller mounted on a transverse shaft, 33, journaled in bearings 34 in standards mounted on the top of the table. The said roller 32 is provided with an angular or curved groove, 35, at its periphery, which may be corrugated, as shown in Fig. 5 of the drawings, the roller being located directly over the filler-belt trough or guide at the point where it begins to be contracted.

The number 36 indicates a pulley journaled upon a shaft secured to an adjustable block, 37, located in a guide-slot, 38, in the standard 39, secured to the top of the table at one side of filler-belt trough.

The number 40 indicates a set-screw by means of which the block 37 may be adjusted.

From the roller 32 to the pulley 36 extends an endless belt, 41, the two rollers being so located with respect to each other and the filler-carrier belt and trough that the lower portion of belt 41 will travel over the tobacco and in contact with the same as it is carried along the filler-carrier belt through the gradually-contracted part of the filler-belt trough or guide, and by reason of the curving of the belt 41, caused by the gradual contraction of the trough and filler-carrier belt, will gradually compress the tobacco into cylindrical form.

The shaft 33, Fig. 1, has mounted on it a pulley, 42, which connects by means of a crossed belt, 43, extending through an opening, 44, in *in* the table, with and running around the wheel 45 on the shaft 9, by means of which motion is given to the wheel 32.

The number 46 indicates two small rollers journaled in suitable bearings, and adapted to press upon the tobacco in the filler-carrier belt just previous to its entrance to the filler-forming conductor 14, by means of which the tobacco is packed as the belt 11 is closed around the tobacco, preventing the escape of the tobacco, which would otherwise be apt to occur.

The number 47 indicates a curved bridge extending from within the diverging end of the conductor 14 across the opening 17 and into a gradually-contracting guide, 48, by means of which the paper wrapper 49 is conducted to the filler.

The bridge 47 is formed of a sheet-metal strip curved to have about a semicircular shape in cross-section, and is wide enough to permit

the filler to pass freely. Its end within the flaring end of guide 14 is soldered thereto, but at its other end is loose in the guide 48, so that the paper may passed freely under it. The said guide 48 consists of a metallic strip folded at its edges, as shown, to form guide-grooves at each side for the edges of the paper strip. The upper end of said strip is bent at right angles, or thereabout, as shown in detail in Figs. 8 and 10 of the drawings, and is gradually contracted toward its upper end, the lower end extending down through the opening 17 in the top of the table. At the upper end of the strip the guide-lips are curved the same as the body portion, upon which they are lapped, and thus form inner curved walls, between which and the outer wall or body portion the paper is folded into tubular form as it passes, as illustrated in Fig. 10. The edges of the tubular end of the guide may slightly lap each other, so that the edges of the paper will lap correspondingly as it emerges.

177½ The number 50, Fig. 2, indicates a reel mounted on a shaft journaled in suitable standards and carrying paper strip 49 wound into a roll. The paper from the reel passes up through the guide 48, and is gradually brought into cylindrical shape, and at the same time wrapped around the continuous filler.

In proximity to the outlet of the bent guide 48 is a flexible finger, 51, passing between the two edges of the paper tube or wrapper for keeping the edges of the wrapper separated, compressing and holding the lower or inner edge upon the filler, guiding and holding it in proper form. The filler with its wrapper is then conducted into a conductor, 52, the edges of which overlap each other, as shown in cross-sectional view, Fig. 1ᵇ, so as to leave an intervening space between said edges of sufficient size for the passage of one edge of the projecting paper or wrapper.

The number 53 indicates a pasting-disk located in such manner with respect to the chamber 52 that said disk will have its edges during rotation between the two lapping marginal edges of the wrapper. Rotary motion is imparted to said disk, which revolves under the paste-reservoir 54, and forms the bottom thereof in any suitable manner, so as to take up and deliver a sufficient and uniform quantity of the paste to the edge or edges of the wrapper. The pasting-disk is mounted on an upright journal, 55, and is rotated thereon by means of a pulley, 56, around which is carried an endless band, 57, passing over pulleys 58 and 59, Fig. 1ᵃ, sheet 2, down through the table and around a pulley, 60, on the driving-shaft 2.

The rear end of the conductor 52 extends within but is not attached to the forward end of the flaring or bell-mouth conductor 61, so as to deliver the filler with the wrapper surrounding the same into said conductor.

Just in advance of the pasting device is located a flexible buff-smoother, 62, consisting of a piece of soft leather, such as chamois-skin or other suitable material, secured to the table at one side of the cigarette and extending through an opening, 63, in the table, the free end being provided with a small weight, 64, by which a gentle pressure is brought to bear upon the cigarette to smooth the wrapper and join its edges.

The number 65 indicates a driving-pulley mounted on a transverse shaft, 66, journaled in suitable bearings in the frame of the machine. The said shaft is provided with a cog-gear, 67, intermeshing with a worm, 68, on the driving-shaft 2, the pulley, cog-wheel, and worm being precisely similar to the driving-pulley, cog-wheel, and worm for operating the filler-carrier belt before mentioned.

Tht number 69 indicates a belt, which may be termed a "cigarette-carrier" belt, extending through the conductor 61 and downward through the apertures 70 and 71 in the table, around the pulley 65 and the small pulleys 72 and 73. The driving-pulleys and operating mechanism of the respective bolts—that is, the filler-carrier bolts—being precisely identical in size and arrangement, it is evident that the two belts will be moved in perfect unison with each other.

The number 74 indicates a roller mounted upon a lever, 75, fulcrumed to the frame at 76, and 77 a set-screw extending through a bracket, 78, back of the lever 75, by means of which the belt 69 may be pressed into contact with the pulley 65, to insure said belt being positively carried by the pulley without any possibility of slipping.

The cigarette-carrier belt is curved upon entering the conductor 61 and compressed around the cigarette, uniting its pasted edges, and feeding it forward, in a completed condition, to a guide or conductor, 79, from which the continuous cigarette is finally discharged from the machine. The letter C, Figs. 1ª and 2ª, indicates the cigarette passing from conductor 61 to guide 79.

The number 80 indicates two wheels or disks mounted on the main driving-shaft at the projecting rear end of the same. The said disks or wheels are provided with cam-grooves 81. Upon the shaft, between the two cam-grooved wheels, is mounted a grooved pulley, 82.

The number 83 indicates two angle-levers mounted on a shaft, 84, secured to the frame of the table and to a suitable bracket, also secured to the frame of the table. The lower ends of said levers are provided with friction-rollers 85, which set in the cam-grooves 81, and the upper ends carry the rotating cutters 86, the levers and cams being so arranged relatively as to move the cutters together at proper intervals to sever the continuous cigarette into equal and uniform lengths as it is fed through the conductor 79.

The cutter-shafts are provided with grooved pulleys 87, which are connected, by endless bands 88 89, with the grooves 90 in a pulley, 91, mounted on the shaft 84 between the angle-levers, the said pulley being provided with a groove, 92, which connects, by an endless band, 93, with the pulley 82, whereby a rapid rotary motion is imparted to the rotary cutters.

The operation of our improved machine is as follows: Long-cut tobacco, which has been drawn or impregnated with moisture several hours before, is deposited in the hopper, being thrown light in and evenly distributed, so as not to pack, to bring the weight of the top of the mass on the lower portions of the same. The working parts of the machine having been set in motion, the distributer,

being operated by positive mechanism, will distribute the tobacco in uniform quantities upon the filler-carrier belt as it moves through the semi-elliptical trough or guide, partially curving the belt around the tobacco, so as to carry it without waste, and begin the initial formation of the filler.

178 The trough 12, it will be borne in mind, is of semi-elliptical shape in cross-section, as shown in Fig. 6, from its end under the hopper to the point where it begins to contract under wheel 32, so that the tobacco is prevented from falling off the belt. As the belt passes forward under the grooved roller 32 and belt 41 the tobacco is seized and fed forward, and its upper surface is pressed into shape approximating the shape of the lower surface, or, in other words, the tobacco is caused to assume an elliptical shape in cross-section as it passes under said belt 41 by reason of the curved form given to the belt by passing over the curved periphery of the roller 32, and the gradually-contracted extremity of the trough reduces it to cylindrical form, and the rollers 46 compress it on its way to the conductor 14, so that it may enter the same freely without waste. On its passage through said conductor the belt 11 is caused to completely encircle the tobacco, completing the filler, which emerges from the flaring mouth 15 of said conductor 14 in a condition sufficiently solid to be projected without breaking in its onward course through the curved bridge 47 and the paper-guide 48. Here it meets with the strip of paper 49, which is curved up through said guide, and by means of the contracted upper end of said guide is enveloped by the traveling strip of paper. The filler and its inclosing-wrapper then pass through the wrapper, being supplied with paste at one or both edges by the pasting-disk 53, after which the filler and inclosing-wrapper are carried by the belt 69 through the conductor 61. Previous to passing into the conductor 61 the filler and wrapper pass through the smoother 62, by which the whole is gently compressed, so as to smooth the paper and unite the cemented edges. The continuous cigarette, after passing through the conductor 61, is fed onward through the conductor or guide 79 to the cutters 86, which are operated by the before-mentioned mechanism to approach each other at proper intervals to sever the cigarette into equal and uniform lengths.

What we claim is—

1. The combination, with the traveling filler-carrier belt of a cigarette-machine, of a longitudinal trough or guide extending under the hopper and forward to a compressing-roller, the said trough or guide being semi-elliptical in cross-section, or approximating thereto, whereby the belt is caused to assume a similar form to receive the tobacco, give it its initial form, and carry it forward without waste, substantially as specified.

2. In combination with the traveling filler-carrying belt and the curved trough or guide, a grooved pressure-roller and a pulley mounted on an adjustable journal provided with adjusting mechanism, the roller and pulley being connected by an endless band adapted to travel a short distance in contact with the filler to curve

the upper part and assist in feeding and compressing the same, substantially as specified.

3. In combination with the feed-pulleys, their endless connecting-belt, and the filler-carrier belt and the trough, the two small pressure-rollers located in advance of the feed-pulleys to compress the tobacco before entering the filler-former chamber, substantially as specified.

4. In combination with the trough or guide, the traveling filler-carrying belt, and compressing and upper feed mechanism, a filler-forming tube, through which the belt and filler are passed, whereby the filler is completely formed and fed forward.

5. In combination with the mechanism for feeding and forming the cigarette-filler, a curved conducting-bridge, 47, leading from the filler-forming conductor over the aperture through which the carrying-belt passes from the table into a guide, through which the paper or wrapper passes to be applied to the filler.

6. In combination with the mechanism for feeding and forming a filler, a paper-guide consisting of a flat strip of metal having guide-lips folded at its edges and gradually contracted into conical tubular shape at its upper end, its lips being curved longitudinally, the same as the body portion of the strip, and forming curved inner walls, between which and the outer portion of the strip is a passage for the paper, substantially as described, and for the purpose set forth.

7. In combination, in a cigarette-machine, the filler-forming mechanism and filler-carrier belt, with suitable wrapper-forming mechanism and an independent wrapper-carrier belt, whereby all danger of soiling the wrapper is obviated during the formation of a cigarette.

8. In combination with the filler-forming mechanism, wrapper-carrying belt, and pasting mechanism, a flexible smoother or buffer adapted to press the edges of the wrapper together with a yielding pressure to smooth out the wrapper and secure its edges.

9. In combination with the mechanism for feeding and forming the filler and the conductor through which the feeder and wrapper pass during the operation of pasting, an endless cigarette-carrier belt, 69, and conducting-tube, 61, through which said belt passes, whereby the wrapper is secured around the filler to complete the continuous cigarette and said cigarette is fed forward, substantially as specified.

10. In combination with the driving-pulleys of the respective carrying-belts, a longitudinal shaft, journaled in suitable bearings and provided with worm-gears meshing with cog-wheels on the shafts of the driving-pulleys, whereby a positive motion is imparted to each and they are caused to move in perfect unison.

11. In combination with the longitudinal shaft, curved carrying-belt 12, and intermediate connecting devices, a cog-wheel mounted on said shaft, and an intermeshing cog-wheel journaled in suitable bearings and provided with a pitman connected with the segment 24, and cog-wheel 25, mounted on the rock-shaft of the distributer in the hopper, whereby a positive motion is given to the distributer in unison with said belt, in order to secure a uni-

178½

form distribution of the tobacco upon the filler-carrying belt, substantially as specified.

12. The combination, with the longitudinal shaft, of two wheels provided with cam-grooves, and two angle-levers, pivoted to the frame of the table and carrying at their upper ends rotary cutters, their lower ends being provided with friction-rollers setting in the cam-grooves, whereby the cutters are operated to sever the continuous cigarette into proper and uniform lengths, substantially as specified.

In testimony whereof we have hereunto set our hands in the presence of two subscribing witnesses.

CHARLES G. EMERY.
WILLIAM H. EMERY.

Witnesses:
JOHN D. LITTLE.
HENRY HENJES.

179 *Deposition of E. T. Pollrd and Milton Cayce for Plaintiff.*

The depositions of E. T. Pollard, taken in rebuttal, and of Milton Cayce in chief, taken before me, Daniel Grinnan, a notary public in and for the city of Richmond, in the State of Virginia, at the office of J. H. Webb Peploe, No. 30 Shafer's building, in said city of Richmond, taken by consent of all parties concerned and in accordance with a telegram from the attorney of the defendant filed with this caption; said depositions to be read on behalf of the plaintiff in a certain cause in equity in the United States circuit court for the western district of Virginia, at Lynchburg, Virginia, under the style of E. T. Pollard, plaintiff, against The Bonsack Machine Company, defendant.

Present: J. H. Webb Peploe, of cou-sel for the plaintiff; A. H. Burroughs and D. B. Strouse, counsel for defendant; Milton Cayce and E. T. Pollard, witnesses.

Aug. 20th, 1890.

DANIEL GRINNAN, *N. P.*

LYNCHBURG, VA., *August 18th*, 1890.

J. H. Webb Peploe, att'y, Rich., Va.:

Will be present and ready to begin deposition nine o'clock Wednesday morning.

A. H. BURROUGHS.

MILTON CAYCE, the first witness, being duly sworn, deposeth and saith as follows:

1st question by W. H. W. PEPLOE, Esq. Please state your age, residence, and occupation.

Ans. My age is 56; occupation, tobacconist, and I reside in Henrico Co., Va.

2nd Ques. Where were you about January 1st, 1888?

Ans. I was somewhere in Richmond.

3rd Ques. Did you about that time have any conversation with Mr. James A. Bonsack? And, if so, state where and to what effect.

Ans. I don't recollect distinctly whether it was about that time. I had a great many conversations with Mr. Bonsack, but I remember distinctly having a conversation with him about the tube in question, in which I said to Mr. Bonsack that he knew that Mr. Pollard made the tube in question, and that in my opinion and in justice to Mr. Pollard that his company should pay Pollard for making or inventing the tube, as the machine was worthless until that tube was used. After making this statement to Mr. Bonsack he acknowledged the justice of Mr. Pollard's claim and said he had or would—I don't remember which distinctly—recommend to the company to pay Pollard or compensate him. This is the substance of what passed between us.

4th Ques. Was the substance of Mr. Bonsack's statement to the effect that Mr. Pollard should be compensated for a gratuitous gift to the company, or that the payment alluded to should be in consideration for the use by the company of Pollard's tube?

Objection noted because it presumes that which has not been proven in this case; also because leading.

Ans. That is what I distinctly understood him to mean, and why I understood him to mean that I made the statement to Mr. Bonsack that he well knew that Mr. Pollard invented this tube; that his machine was worthless until that tube was applied to it; that Mr. Pollard was a poor mechanic; that the Bonsack Company, as I understood, was wealthy and able to pay and that it should pay him for that tube.

Foregoing objected to on the following grounds, right being reserved to do so at this point:

180 Foregoing question and answers, so far as they purport to detail conversation had with James A. Bonsack, are objected to because no sufficient ground for contradiction had been laid; also because James A. Bonsack is not a party to this suit, nor is he at the present time nor was he at that time an officer of the defendant company, and the Bonsack Machine Company is neither bound or effected by anything he may have said nor any opinion he may have entertained.

Cross-examination without waiving foregoing objections:

1st Ques. Where did this conversation occur and who was present at the time?

Ans. At the office of Allen & Ginter: myself and Mr. Bonsack present.

2nd question. Were you not at that time and are you not now in the employ of Allen & Ginter?

Ans. At that time I was connected with Allen & Ginter, and at the present time in the employ of the Allen & Ginter branch of the American Tobacco Co.

And further this deponent saith not.

MILTON CAYCE.

E. T. POLLARD, the next witness, being duly sworn, deposeth and saith as follows, being recalled in rebuttal:

1st Ques. by Mr. PEPLOE. Did you or did you not at any time tell Mr. Strouse, the president of the Bonsack Machine Company, that he or his company ought to apply for letters patent upon the tube invented by you and as used by them in their machines?

Question objected to on the ground that there is no proof in this case that Mr. Pollard ever made such a statement relative to the tube in use on the Bonsack machine.

Ans. No, sir.

2nd Ques. Mr. Strouse has testified that in June, 1883, you examined, with himself, the drawings of the Bonsack patent. State whether or not you had ever seen the drawings of the Bonsack patent prior to your application for a patent upon your own invention in September, 1883?

Ans. I had never seen any drawings of the Bonsack patent until I went to Washington to apply for my patent. Mr. Notingham and myself looked them over then in the Patent Office.

3rd Ques. The Bonsack Machine Co. claims that prior to your departure for Europe, about the beginning of 1884, and after your application for a patent, that you gave them a license to use your patent, and that thereunder you gave instructions to R. W. Thurman, of Lynchburg, how to make your tube. Did you or did you not so understand your position to the company? And, if not, explain your reasons for giving these instructions to Thurman.

Ans. I had an agreement with the company to go to Europe to receive some machines being built there, and before signing this contract or agreement I asked Mr. Strouse, the president, if this agreement would have anything to do with my patent. I mean by that giving away my rights under the patent. I said to Mr. Strouse that I had refused to sign one contract on that account, and would sign no contract or would have nothing to do with the company whatever that would effect my patent that I had applied for. Mr. Strouse assured me that this contract would have no effect whatever on my application. He said at the time that I had no patent, therefore could not effect any that would be granted to me; that I would have to make an assignment of my patent or application to the company to effect me in any way; that this contract was only to bind me to do my duty in the interests of the company as an employee of the company while in their employment. Mr. Strouse told me at that time that they would be glad for me to obtain a
181 patent; that if I did they would buy it or give me stock in the company to compensate me for it; that it would be as much to my interest for the company to succeed as it would be the company, *rp*oviding I got my patent; that my patent would be of no use unless the co*map*ny was a success, and on that asked me to show Thurman how to make these tubes; that if they did not have some one to make the tubes they would have to stop the mach-nes, whereupon I agreed to learn Thurman, *rp*oviding this did not effect

my rights. Mr. Strouse said if I did not learn Thurman they would have somebody learned, after I left, to have these tubes made; that I had no right to stop them or any one else from the use of these tubes until my patent was allowed. Then I went to Thurman and told him that I would learn him to make these tubes providing he would learn no one else or show no one *esle* how to make them; that the Bonsack Machine Co. was going to have them made and I had no authority to stop them from having them made until the patent was issued, and I told him at the time that I would stop them from using them if they did not pay me for *for* them when my patent was allowed. He promised me that he would — any one or learn any one how to make the tubes, and would stop making them at any time I wish him to. I said that I had rather you would make them than any one else because you are a friend of mine and I like to give you this work to do.

Objection noted. The above answer is objected to because the contract referred to was reduced to writing, and parol testimony cannot be introduced to alter or vary it.

Counsel for plaintiff replies that so far as the above answer relates to the contract it is to be taken as explanatory thereof and not as contradicting.

4th Ques. It has been testified on behalf of defendant that the mandril already filed in this cause was furnished you by the Bonsack Machine Co. for the purpose of manufacturing tubes, and that with this tool, as the property of said company, you invented and made the tube you subsequently patented. Please state whether this is so and anything else in connection with the relation of the mandril in question to the manufactury of your tube.

Ans. That mandril was sent me in a box of tubes. It was not stated what for, but the mandril sent me is the mandril used in making the tapering part of the Bonsack wrapping tube. I could make no use of it in any way in the making of my tube. This mandril is just the shape and size of the Bonsack wrapping tube, and could not be used for any other purpose as a man-ril.

5th Ques. Please state what you used as a mandril in the manufactury of the "Exhibit Tube" and what kind of mandrill is now used in the manufactury of tubes similar to yours.

Ans. In making the tapered part of my tube I cut out a place in a block of wood, tapered U-shape, and hammered the tapered parts of my tube into this U-shape with a hammer. I did not use the mandril of any kind in making that part of the tube. My "Exhibit Tube" or the tube I made—the small part of the tube or rather the barrel—was made of a brass pipe, and I did not use any mandril for that whatever.

We use the mandril for straightening up the barrel part of the tube, just a plain rod like the mandril now filed and marked mandril No. 2; that is the mandril I had made for straightening up the barrel part of the wrapping tube then used on the Bonsack machine. I have the same charged on my account rendered the Bonsack Machine Co.; the acco-nt has be filed.

The mandril is used at the factory for straightening up the barrel parts of the tube, on which part my patent has no claim.

6th Ques. If the mandril originally sent you and already filed was not sent you, as defendant alleges, for the purpose of experimenting and improving on the Bonsack tube, to what use were you expected to put it?

182 Ans. That was sent me, as I understood it, to straighten *ing* up the tube which they got out of shape. Mr. Thurman was to make and send me any tubes that I might need. My duty was, and the agre-ment made in the presence of Thurman, *were* run the machine. Mr. Strouse stated in Thurman's presence that the machine was all right; the fault was not in the machine, but in the man they had running it at the time Allen & Ginter had stopped them from work.

7th Ques. Who, then, did furnish the necessary tools and material to make "Exhibit Tube"?

Ans. I furnished the material myself; borrowed the tools from the engineer, Mr. Hughes.

8th Ques. How many tubes similar to "Exhibit Tube" and to the one patented by you have you actually made?

Ans. The "Exhibit Tube" and the model tube and the tube I assisted Thurman in making are the only tubes I have ever made. I worked on some six or eight of the Bonsack tubes before I made my tube, and I tried to work some after I had made my tube, but Mr. Pope would not have the work, and I took them off.

9th Ques. Explain, in your own way, the allegation made that you sent Mr. Krise in Lynchburg a model of your tube and the inference sought to be raised therefrom that you were reporting to the company each step in your progress of improvement on the Bonsack tube.

The foregoing question is objected to. The witness should testify as to facts, not as to matters of opinion and explanation.

Ans. I have no recollection of sending the tube or tubes. Mr. Krise sent me some tubes, as I — already stated, with the mandril to be tried, and I think that was the tube or tubes sent back to Mr. Strouse or Krise. I remember of trying several of them that Mr. Krise or Mr. Strouse, one, had asked me to try, and I think that I must have sent those tubes back. I never made any tube but the one filed and marked exhibit of my patent; therefore I know it could not have been one of my patents.

10 Ques. Mr. Strouse has testified that each machine when shipped from Paris, from the factory of Gotendorf & Co., was supplied with six or eight tubes, and that these tubes were tubes made under your direction and supervision. What have you to say to this?

Ans. There was no tubes shipped with any machine shipped from Gotendorf during the time that I was at Gotendorf'-, and if there was any made I did not know anything about it. It was the understanding that Mr. Thurman was to supply the tubes. There was

nothing said to me about the tubes in any way, but I know that there was none shipped.

11th Ques. Did you superintend or in any way consent to the manufacture of tubes of your patent at Gotendorf's factory during your stay in Paris?

Ans. I did not superintend the making of any tubes while at Gotendorf's. When Mr. Strouse came over and ordered Gotendorf to make some I objected to Gotendorf's making them; whereupon Gotendorf said that my patent in the United States could not prevent him or any one else from making the tubes in France. The tubes that Gotendorf made were made after I left his place. The day I left Paris I had an engagement with Mr. Strouse to meet him at Gotendorf's works.

Mr. Strouse did not come. Gotendorf at that time showed me a lot of tubes—I think he said there were eighty—and wanted me to receive them. I told him that he knew that I objected to their being made, and that I would have nothing to do with them. I left Gotendorf's factory about the last of May or first of June. I was never there afterwards superintending anything being built. I think this was about the 1st of October or November.

I went to Paris to receive the machines that had been built if they were built according to the specifications and draw-
183 ings. I was not superintending the building of the machines, but only to receive them if they were built according to the specifications and drawings.

12th Ques. Your contract with the company provided "that he will do nothing, directly or indirectly, which may at any time come in conflict in any way whatsoever with the interests of the said company or its assignees." State what Mr. Strouse stated to you at the time of signing this contract as being the effect and meaning of these words.

This question is objected to for the reason that parol testimony is not admissible to alter, vary, or contradict a written agreement.

Counsel for plaintiff replies that this question is intended to elicit information of the circumstances attending the execution of the contract and explanatory thereof and in no way to alter or vary its import.

Ans. That part of the contract is what brought up the question about my patent that I had applied for. I asked Mr. Strouse if signing this contract would deprive me of any rights or privileges in my patent. He said that I had no rights until the patent was granted me; therefore it could not effect my application. He said this contract was to insure that I would act in good faith in promoting the interest of the company whilst in their employment.

13th Ques. What was said at the time of the execution of this contract relating to its effect upon the invention you had already made as distinguished from inventions you might make afterwards?

Objected to for reasons assigned above; also because leading.

Ans. Mr. Strouse stated that this contract would have nothing whatever to do with the patent I had applied for. I told him that I would not sign any contract or have anything to do with the company that would effect my patent in any way; that I would quit the company rather than sign the contract signing away my rights and privileges to my patent. I also had that contract written, or asked Mr. Strouse to write it, to have my salary the same as I had been getting heretofore, and $50 added a month while I was *while I was* out of the United States. I thought that would show that I was not receiving any more than I had gotten by signing this contract. Mr. Strouse offered to give me a larger salary if I would sign the first contract, which I refused to do, and he also offered to give me $1,000.00 to sign it.

14th Ques. My question is hardly answered. What, if anything, was said at this time in regard to the effect of the contract on future inventions that you might make as distinguished from that you had made? In other words, was anything said or not limiting the contract in its effect?

This question excepted to for reasons last above assigned.

Ans. As I understood it and as Mr. Strouse explained it to me, that any improvements that I would make on the machine after signing this contract and in the employment of the company that the improvement would belong to the company; that it would not effect anything I had done before. I understood the contract to last to the first of May or the last of April. Mr. Strouse told me I would get through with all I had to do in Europe and come back by that time. I understood it to mean that I were to do anything to improve the machine that I could.

15th Q-es. Mr. Strouse has testified that in no part of the Bonsack machine *that* sheet brass *ware* out except in the tube, and alleges that the sheet brass charged for in your account already filed was used by you at their expense in the experiments which resulted in your patented tube. Have you anything to say as to this, and does sheet brass need replacing in any other part?

Ans. There are some eight or ten *palces* on the machine I had at that time that sheet brass is used on. The pieces *ware* out, and at that time these places were not properly fitted, and I got
184 brass and refitted them or made new pieces. Good many of the pieces that I put on are on the machine yet—at the time Mr. Strouse speaks of. They use sheet iron and tin now in place of the brass.

16th Ques. In the deposition of John H. Flood in behalf of the defendant, in answer to the third question, the witness states "he (meaning Pollard) thought that the improvements that he could make upon it (meaning the Bonsack machine) would be worth more to the company than his salary, and that he would make very material improvements upon it if they would give him the position." Did you or not ever make this statement to Mr. Flood or any one else?

Ans. I never made this statement to Mr. Flood or any one else. I

were not acquainted with Mr. Flood nor never had spoken to him until the day I started for Europe. Mr. Krise then introduced me to Mr. Flood as one of the Bonsack owners. That is the first and last time that I ever saw Mr. Flood to know him. As to the improvements on the machine, I never saw the machine until Mr. Thurman and Mr. Strouse came with me to Richmond. I would not agree to come to Richmond unless Mr. Thurman would come with me or meet me here and learn me to run the machine. Therefore I could not have said that I would improve the machine. Mr. Thurman was after me a long time to take this place; said the company wanted him, but he could not go, and thought the place would suit me. I told him that I did not care for the place and would not accept of it. The next thing I heard of it was Mr. Thurman sent for me to come to his shop; introduced me to Mr. Strouse. All that I ever said about the machine or working for the company was said in Mr. Thurman's presence. I told Mr. Strouse that if he wanted any reference as to my standing to go to Robinson, Tate and Co. I don't know whether he went or not.

17th Ques. It is in evidence that Mr. Strouse made you offers ranging from $25.00 to $1,000.00 to sign this contract shown you at Ford's hotel, and Mr. Strouse testifies that this was offered you not in purchase of your rights, but as a compensation for the extra time you had worked on the tube after working hours. What have you to say as to this?

Ans. I understood Mr. Strouse's offer that he would give me the money to give up my patent that I had applied for. He said at the time, We have got too much money to let any poor man beat us. If you do not take this I will have your patent stopped. I said to Mr. Strouse that I would not think of taking that; that they had paid, as I understood it, $18,000.00 for Hook's patent, and I thought mine worth a great deal more than Hook's.

Mr. Strouse said that was all he could offer, but he would call a meeting of the board and see what could be done. I filed several letters in this cause as evidence, or at least gave them to my counsel, relating to the calling of the board.

18th Ques. Is there any matter or thing material to this controversy and relavent in your position as rebutting witness upon which you have not been examined and as to which you desire to testify?

Ans. I would have to go all over my answers to ascertain this.

(NOTE.—Deposition read to witness.)

In answer to 3rd question I don't think I answered as to license. I did not understand that signing this contract or showing Thurman how to make those tubes were giving any license. I objected to the Bonsack Company using those tubes at the time I refused to sign the first contract. I never have consented to them using it at any time. I did not think that I had any rights, as Mr. Strouse had told me, until my patent was issued. I told Thurman that I would stop them from using it as soon as the patent were granted me. I also wrote to Mr. Pope and to my attorney in Washington, from New York, to push my patent ahead; I mean that to

my attorney. I wrote Mr. Pope to let Mr. Nottingham,
185 my attorney, have any money he might need and I would settle with him on my return. Therefore I could not have thought that this contract were giving a license for the use of the tube.

19th Ques. Was there anything, independently of this contract, by which you intended to give or thought you were giving the license to the Bonsack Machine Co. to make, use, or sell your invention?

Ans. I didn't think that I were giving any license, or, in fact, I didn't know anything about any license. I thought the only way I could give a license were to make an as-ignment of my patent or applacition, which I had done in other patents that I had obtained. I thought that no license—I thought that nothing that I could do would give a right or license to use my patent unless I signed it over to some one.

And further this deponent saith not.

E. T. POLLARD.

VIRGINIA, *City of Richmond,* } *To wit:*

I, Daniel Grinnan, a notary public in and for the said city of Richmond, in the State of Virginia, do certify that thy foregoing depositions of Milton Cayce and E. T. Pollard were taken before me, at the instance of the plaintiff, for the purposes and at the time and place recited in the foregoing caption, and were duly signed before me and closed by me on the 20th of August, 1890.

Given under my hand this 20th of August, 1890.

DANIEL GRINNAN, *N. P.*

186 *Deposition of R. W. Thurman.*

The deposition of R. W. Thurman, taken before me, John G. Haythe, a notary public in and for the city of Lynchburg, in the county of Campbell, State of Virginia, to be read on behalf of the plaintiff in a certain cause in chancery depending in the United States court for the western district of Virginia, wherein E. T. Pollard is complainant and The Bonsack Machine Company is defendant.

Present: J. H. Webb Peploe, of counsel for complainant; A. H. Burroughs, of counsel for defendant.

Said depositions being taken for the above express purpose by consent of all parties concerned.

R. W. THURMAN, being a witness of lawful age, being first duly sworn, deposes and *says*:

1st question by Mr. PEPLOE. What is your name, residence, and occupation?

Ans. Name, Robert W. Thurman; occupation, stencil-cutter and general repairer; residence, 625 Main street, Lynchburg, Va.

2nd Q. by same. Are you or not the same R. W. Thurman who, as has been already testified in this cause, made for the Bonsack Machine Co. cigarettes tubes after the model of the Bonsack and Pollard patents already filed in this cause?

Ans. Yes, sir.

3rd Q. by same. The witness Newberry in his deposition filed in this cause states that there is no difference in principle between the Bonsack tube, "Exhibit X X X X," and "Exhibit Tube." From your acquaintance with these tubes already expressed in your deposition-in-chief explain as briefly as you can wherein the witness is wrong, if at all, and what you beleive to be the distinguishing principle.

Ans. There is a great deal of difference between the two. Mr. Pollard's tube compresses the filler, and I have never been able to get any tobacco through the Bonsack tube by compressing it. My experience has been with the Bonsack tube that the filler had to be compressed before entering the tube, whereas in the Pollard tube the filler is compressed and made round in the tube.

4th Q. by same. Distinguish by the names given the tubes as exhibits between Pollard's tube and the Bonsack tube.

Ans. The Bonsack tube has a single spiral gro-ve and the Pollard tube has two straight gro-ves; the Pollard tube has a tongue for compressing the tobacco or filler, the Bonsack tube has none. That is about the only difference I can get.

5th question by same. The witness Newberry states that the gro-ves on the Pollard tube designated by you as "straight" are not "straight," and that should he cut the gro-ve on the left-hand side of the tube so that it would disappear entirely at a point opposite the abutement that the same purposes would be achieved. Please state wherein he is wrong, if at all.

Ans. I don't think that if the tube were cut in that way that it would work, although I couldn't say positively without trying it. I don't think, though, that it could possibly work and make a perfect cigarette.

6 Q. by same. The witness Newberry states that the tongue inserted in the Pollard tube is flexible at its end; that it will give and spring open if an unusually large lump of tobacco passes and again resume its former position. Please state whether this is so or not and your reasons.

Ans. The tongues in some of the Pollard's tubes are so arranged that by placing the cleat or brace far enough back to make the point of the tongue a little flexible, but that is the fault of the
187 maker. The point of the tongue is intended to be made as rigid as possible, and the more rigid the point of the tongue the better I have found the tubes to work. As that point is the smallest part of the tube, I don't think an unusual large piece of tobacco could go through the tube. My experience has been when any great amount over a sufficiency of tobacco would choke the tube and break the paper. Consequently the tube would have to be cleaned and started afresh.

7 Q. by same. Please state by reference to sheet 2 of the Pollard

patent No. 302,521 what portion of the tube there drawn is smallest in its inside diameter, and explain your reasons for your answer and make your statements by reference to the letters and numbers there given.

Ans. In figure 7 the letter "*o*" is the smallest in diameter. I mean the tube at that point. The reason why it is smaller at that particular point is because the tobacco is compressed there, in order to make the filler smaller than the rest of the tube. After the tobacco has been compressed and comes from under a press, immediately there is a reaction, and the tobacco opens up and assumes a larger bulk; hence at that point the filler is compressed smaller to allow it to work freely through the rest of the tube.

8 Q. by same. In the figure referred to there are three points designated "*o*"—one *o* and one "*o'*" and one o^2. State whether you mean *o*, *o'*, or o^2, at the point at which the tube is smallest.

Ans. I mean *o'*.

9 Q. by same. State whether at the corresponding point in the Bonsack tube this is the smallest point in diameter as in the Pollard tube.

Ans. In the Bonsack tube at the same point it is larger and is made the same size from that point to the end.

10 Q. by same. Give as short a definition as you can of the difference a wrapping tube and a compressing and wrapping tube in one as compared between the Bonsack and Pollard tubes.

Ans. The difference between the Bonsack and Pollard tubes is that the Pollard tube has a tongue inserted between the two open gro-ves for compressing the filler or tobacco, and the Bonsack tube has none. I have never been able to get the Bonsack tube to work with any satisfaction by trying to force a filler through larger than the tube.

11 Q. by same. State in so many words whether Pollard's tube is a wrapping tube or a wrapping and compressing tube; and state also which of these two the Bonsack tube is.

Ans. The Polla-d tube is a wrapping and compressing tube, and the Bonsack tube I take it to be a wrapping tube, as I have never been able to compress tobacco in it.

12 Q. by same. The witness Newberry states that the filler enters the tube in substantially the same condition in both the Bonsack and Pollard tubes. State from your knowledge of the machines and tubes whether it is or not.

Ans. No, sir; it is not so. The filler enters the Pollard tube in a much looser condition than in the Bonsack tube. I have always had to press the filler much harder to get it through the Bonsack tube.

13 Q. by same. You have stated that you made for the Bonsack Company both Bonsack and Pollard tubes. State whether or not, after the Pollard had been made, you made any of the Bonsack tubes for use by the Bonsack Company, and which tube they used exclusively on their machines.

Ans. Yes, sir; I have made both the Bonsack and Pollard tubes. I never made any of the Bonsack tubes after I commenced to make

the Pollard tubes. I cannot say whether they were used exclusively, but suppose they were, as I know of no one else but myself who was making tubes.

Counsel for defendant excepts to so much of the above question and answer as permits of supposition on the part of the witness.

14th Q. by same. Examine the large mandril filed by the
188 complainant in this case and state whether or not you could make the Pollard tube upon it.

Ans. No, sir; I could not.

15th question by same. Examine the Emery model filed by defendant in this cause and state whether it embraces the same principle, so far as the tube is concerned, as the Pollard patent.

Ans. I can't see that it embraces the same principles and don't see how it is possible for the Emery tube to make a cigarette without the filler being pressed a great deal smaller before entering the tube.

16th question by same. In using the word "smaller" do you use it with reference to the cigarette or with reference to the tube?

Ans. I use it with reference to the filler inside the cigarette—the tobacco.

17th question by same. Is this Emery model a wrapping tube or a wrapping and compressing tube?

Ans. I take it to be a wrapping tube.

18th question by same. Please state what was your compensation when you went to Cuba in the interest of the Bonsack Machine Co.

NOTE.—Defendant's counsel excepts to the above question and any answer thereto as irrelevant matter.

Complainant'- counsel replies he is laying foundation in asking this question for what will hereafter appear to be very relavent and very pertinent to one of the questions at issue.

Ans. They paid me $100.00 a month and all expenses.

19th question by same. The witness Newberry states that Pollard simply transferred the right-hand gro-ve to the left hand. Is this true; and, if not, why not?

Ans. No, sir; I can't see that it is true for the right-hand gro-ve still remains and Mr. Pollard has added another and entirely new one.

20th question by same. Even had he transferred it would the purpose and object of the gro-ve be the same, the wrapper proceeding as it does in the Bonsack tube?

Ans. By changing the gro-ve from one side to the other in the Bonsack tube it would be impossible for it to make a cigarette.

21st question by same. President D. B. Strouse has testified that Mr. Pollard instructed you how to make his tube for the benefit of the Bonsack Company, and that in so doing Pollard gave you the unrestricted right to make his tube for the company. State whether or not Pollard accompanied his instructions to you with any words indicating a restriction or an intention to restrict you from making

or the company from using his tubes and any conversation that was had on that occasion.

NOTE.—Counsel for the defendant excepts to the above question because it is leading and to some extent calles for matters of opinion.

The witness should be required to state what instructions, if any, were given him by Mr. Pollard and leave it for the court to say to what extent, if any, the witness was restricted in making or the defendant in using the tube mentioned.

Ans. When Mr. Pollard showed me how to make his tube there was nothing said whom they were to be made for or used by. Mr. Pollard requested me not to show any one else how to make his tube. I don't think there was anything said at the time about making the tube exclusively for the Bonsack Company, but Mr. Pollard told me afterwards (just how long after I can't remember) that he intended to stop the Bonsack Company from using his tubes as soon as his patent was issued.

22nd question by same. Did he state why he did not stop them from using his tube before his patent was issued?

NOTE.—The above question is excepted to because it calls for heresay. Mr. Pollard has testified several times in this case and should be the best witness as to these things; also for other reasons.

Complainant's counsel replies that it is his desire simply
189 to elicit the conserSation that occurred, and he adds that Pollard has already testified on this very subject, but that as Pollard is an interested witness it is the desire of counsel to substantiate and corroberate him by one who has no interest in the subject *in the subject* matter of the dispute.

Ans. Yes, sir; he stated that his reasons for not stopping them was that he had been informed, and was also under the impression himself, that he could not do so until his patent had been issued.

23rd question by same. Do you remember if Mr. Pollard stated by whom he had been thus informed? If so, state what he said.

NOTE.—The above question is excepted to by counsel for the defendant for the reasons last above assigned.

Counsel for the defendant fails to see how the interest of the Bonsack Machine Company can be effected by declarations made by Mr. Pollard to the witness subsequently to the time that Pollard gave the permission to the witness to make the tube in question.

Ans. As Mr. Pollard told me several different times or on several different occasions, I can't exactly remember who he said told him so, but think that on one occasion he said that Mr. Strouse told him.

24th question by same. Did you ever show any one else how to make the Pollard tubes, or did you ever confer upon any — else any of the rights which Pollard had given you to make his style of tube?

NOTE.—The above question is objected to on the ground that the question as to what constitutes conferring the right to make said tube is a question of law.

Ans. No, sir; I don't think I ever did—that is, I have never given any one any instructions for making them, to my recollection.

25th question by same. Was your consent ever asked by the Bonsack Machine Company for any one else to make the Pollard tube?

Ans. No, sir; not that I remember.

26th question by same. Look at Exhibit X X X X X now shown you and state whether the Bonsack tube ever had any of the throat or the roller underneath, all of which is in front of the open trough. In your answer make any reference you choose to the drawings of the Pollard patent, the parts I have referred to being designated in said drawings by the letters A *a a'*.

Ans. No, sir; I don't think the old Bonsack had any roller underneath or any throat plate, to the best of my recollection. It has been so long since I have made a Bonsack tube that I don't remember. I don't think, though, it had a roller or a throat plate.

27th question by same. Before you stopped making tubes for the Bonsack Company do you know whether anybody else was employed for the same purpose?

Ans. Yes, sir; I knew that others were employed to make tubes for the Bonsack Company: one was a gentleman named William Wash; a Mr. Bolton, a Mr. Tabb, and a Mr. Bowles.

Cross-examined by counsel for defendant:

1st X Q. by same. In referring to what you called the "Pollard tube" have you not throughout your entire deposition meant tube like "Exhibit Tube" here shown you?

Ans. Yes, sir.

2nd X Q. by same. In answer to 21st question on direct examination you say that some time after Mr. Pollard showed you how to make tubes for the Bonsack Machine Company he had several conversations with you, in one of which conversations he mentioned the fact that he expected to prohibit the company from using "his tubes" and would have done so before but he was advised he could not do it until after his patent was issued. Please state whether these conversations were before or after the institution of this suit.

190 Ans. I don't remember whether it was before or after the institution of this suit; neither do I remember whether it was before or after the patent was issued. It has been so long ago I can't remember anything about the dates or the time Mr. Pollard made mention of these things.

3rd X Q. by same. Are you an educated mechanical expert; and, if so, where and to what extent were you so educated?

Ans. No, sir; I do not consider myself an educated mechanical expert, although some people consider me one. I am a machinist by trade, having served within a few months of five years' apprenticeship at A. G. Dabney's machine shops in the city of Lynchburg,

but have had experience enough in making cigarette tubes, I think, to judge the difference of one from another in regard to the mechanical and working part of a cigarette tube.

4th X Q. by same. Are you not at the present time engaged in repairing sewing machines, locks, umbrellars, and the like, and is this not the same business that you have been following for several years?

Ans. Yes, sir; I am at the present time engaged in repairing sewing machines, umbrellas, and locks, model-making, making and repairing light machinery of all kinds, and having engaged in this business for 25 or 26 years, together with the machine business.

5th question by same. Under whom did you study model-making and to what extent has your experience and knowledge in this direction reached?

Ans. Having acquired a pretty fair trade as a machinist, I considered myself capable of making almost any light small machinery; and such models as I have made have compared favorably with any I have ever seen. I have made a great many models. I have given general satisfaction in that respect to parties for whom I have worked.

Re-examined by counsel for complainant:

1st question by same. Please state, if you can, what influenced the selection of yourself by the Bonsack Machine Company to make their tubes.

Ans. I judge from the conversation had with Mr. Jacob Bonsack at the time the tube was brought me to make, the drawings and plans of which I now have, that they had tried to have the tubes made by several parties who had declined or failed to make them, and they, considering me a good workman, insisted after trying others that I should make them, feeling confident, as Mr. Bonsack expressed it, of my capacity as a workman to make the tube and give satisfaction. I undertook the job and made the tubes to his or their entire satisfaction, so far as I have ever learned.

NOTE.—The above answer is excepted to so far as it purports to give a conversation had with Mr. Jacob Bonsack. The defendant company is not responsible for language used by him, he having no authority to act for it.

2nd question by same. Do you know from anything stated by Mr. Jacob Bonsack on that occasion as to whether he brought you the tubes on his own account or on behalf of the company?

Excepted to because agency is never proved by the declarations of the party himself.

Counsel for the complainant replies that the object of the question is not to elicit the question of agency so much as to question as to whether Mr. Jacob Bonsack on that occasion expressed the company's opinion or only his own on the subject.

Ans. Mr. Jacob Bonsack, from the conversation he had with me in regard to the tube, was acting directly for the Bonsack Company,

as the drawings were sent to him from Europe by his son
191 "Jimmie," as he expressed it, to have the tubes made, Mr. Strouse, the president of the Bonsack Company, and Mr. Jim Bonsack being at that time in Europe. I think Mr. Strouse was with Mr. Bonsack in Europe at that time. Mr. Jacob Bonsack was brought in my shop and introduced to me by Mr. P. A. Krise, then secretary and treasurer, I think, of the Bonsack Machine Company.

Recross-examined by counsel for defendant:

1st question by same. At the time you were engaged in making tubes for the Bonsack Machine Company was not your office immediately across the street from the Lone Jack Cigarette Company and did you not frequently while making said tubes go to that company and try them on Bonsack machines there being used?

Ans. A portion of that time my shop was immediately across the street from the Lone Jack Cigarette Company, but I made tubes for the Bonsack Machine Company some time, probably as much as a year, before the existance of the Lone Jack Cigarette Company. I did not go to the Lone Jack Cigarette Co.'s for the purpose of trying tubes on or testing them for the Bonsack Machine Co., but was sent for nearly every day, either for repairing the machine printer or tubes.

2nd question by same. Where were the first tubes made by you for the Bonsack Machine Company used?

Ans. At Allen & Ginter's cigarette factory, Richmond, Va.

And further this deponent saith not.

ROBERT W. THURMAN.

STATE OF VIRGINIA,
City of Lynchburg, } *To wit:*

I, John G. Haythe, a notary public in and for the city aforesaid and the State of Virginia, do certify that the foregoing deposition was duly taken, sworn to, and subscribed before me, at the place mentioned therein, pursuant to agreement of counsel.

Given under my hand this 2nd day of September, 1890.

JOHN G. HAYTHE,
Notary Public.

Notary's fee, $3.75, paid by plaintiff.

192 The depositions of D. B. Strouse and others taken before me, Jno. G. Haythe, a notary public in and for the city of Lynchburg, in the State of Virginia, to be read in behalf of the defendant in a certain suit in equity depending in the U. S. circuit court for the western district of Virginia, wherein E. T. Pollard is plaintiff and The Bonsack Machine Company is defendant, taken at the law office of A. H. Burroughs, Lynchburg, Virginia, pursuant to consent of parties, Sept. 3, 1890.

Present: A. H. Burroughs, counsel for defendant; J. H. Webb Peploe, of counsel for plaintiff.

D. B. STROUSE, a witness of lawful age, being first duly sworn, deposes as follows:

1st Ques. by counsel for defendant. Are you the same D. B. Strouse who has previously testified in this cause, and what is your present relation with the Bonsack Machine Company?

Ans. I have before testified in this cause, and am still the president of the Bonsack Machine Company.

2nd Ques. by same. E. T. Pollard, in his deposition taken on the 20th of last month, in answer to question 3, states that you, in a conversation at the time he entered into contract with the Bonsack Machine Company, just previous to his departure to Europe, amongst other things, said to him that the Bonsack Machine Company wanted him to get "his tube" patented, and that the company would purchase the same or give him stock in the Co. and compensate him for it. Please state whether or not you made any such assertion to Mr. Pollard or any other person, and anything else that occurred at that time between you and Mr. Pollard.

Ans. Mr. Pollard is entirely mistaken in that statement. After the conversations between myself and Mr. Pollard, in all of which I understood from him that he intended to stand by the Bonsack Machine Company, and after his signing the contract referred to in the question, it was wholly immaterial to me whether he obtained a patent or not; and to this I should add the further fact that we did not use a tube upon which he had applied for a patent. I did not offer or intimate that the Bonsack Machine Company would buy his patent if allowed. It was certainly not our desire that patents should be obtained that would interfere with our work, which we, to prevent such interference, would have to purchase.

3rd Ques. by same. The witness Pollard, in answer to the 7th question, says that he furnished the material himself for the making of what he calls "his tube," and that a Mr. Hughes furnished him the tools. Please state whether or not this is correct, and fully as to all matters touching this subject, refreshing your memory by any accounts filed as exhibits in this cause.

Ans. I am entirely confident that Mr. Pollard is mistaken in making the above answer. In Mr. Pollard's account against the Bonsack Machine Company, heretofore filed in this cause, which account is dated 1883, I find the following charges:

"June	30.	Paid for tools and material, for tube and shop rent	3 45"
"July	4th.	Sheet brass	40"
		"Shop-room to work and material for making tube	1 30"
"July	24th.	2 files to use on tubes	45"
"	"	Sheet brass	40"
"	"	Solder	15"
"	25th.	Sheet silver for tube	1 50"

This account, which contains other items, was rendered by Mr.

Pollard, and was paid by the Bonsack Machine Company. Mr. Pollard says, in answer to question 8 in his deposition, as follows:

"The Exhibit Tube and the model tube and the tube I assisted Thurman in making are the only tubes I have ever made."

193 In looking at what is called "Exhibit Tube," I find that on the larger end there is sheet silver. There is no sheet silver on the model tube, and I have never seen any other tube for our machines on which there was sheet silver. Mr. Pollard explained to me that he did not have at Allen & Ginter's a suitable place or suitable tools to make tubes; that he had rented a shop with the right of tools in and with which to make tubes, and this to me was a full and satisfactory explanation of the two items in his said account, in which he had included money paid for shop rent and the use of tools.

NOTE.—Counsel for complainant excepts to the above answer because it has not been shown, nor is it a fact, that Pollard never made any tubes whatever except the tubes mentioned in the answer 8 above referred to; and it is unjust and improper, in the absence of further testimony, to attempt to prove by the items of account above quoted that the sheet brass and other materials were purchased for use on the Pollard tubes, when the witness Pollard himself has stated, in his answer 8 above referred to, that he had made several Bonsack tubes before he ever made any of his own.

Counsel for defendant replies that in answer to question 8 above referred to, as clearly appears from reading said answer, shows that the said Pollard did not state that he had made "several Bonsack tubes before he made any — his own," but, on the contrary, did state that "the Exhibit Tube and the model tube and the tube I (Pollard) assisted Thurman in making are the only tubes I (Pollard) have ever made." It is true that he states that he "worked on" some Bonsack tubes.

Counsel for complainant rejoins thereto that the question 8 in Pollard's deposition refers solely to tubes similar to Exhibit Tube and to the one patented by Pollard, and has no reference whatever to Bonsack tubes.

4th Ques. by same. Is it true that the witness Pollard never made any tubes except "Exhibit Tube," "Model Tube," and the tube he assisted Thurman in making? Please state fully as to the facts.

Ans. When I met Mr. Pollard in Richmond the first time I spent several days with him at Allen & Ginter's factory and at Ford's hotel in the evening. I was intensely anxious (Mr. Bonsack being then in Europe) that Mr. Pollard should be able to bring the machine to a standard of work that would be satisfactory to Messers. Allen & Ginter. We found that the tube on the machine, which was an original Bonsack tube and one of the first tubes which had been made by Mr. Thurman and which he had made wholly without the assistance or direction of Mr. James A. Bonsack, was not properly constructed; and we regarded the whole trouble with the machine as growing out of the defective tube, which we discussed at much length. Mr. Pollard took great interest in the matter of

the tube, and asserted his entire confidence in his ability to make for us a much better tube than the Bonsack tube, which I encouraged him to do as quickly as possible, and which he assured me he would do, and very soon thereafter he had constructed and put on the machine a tube which appeared to work fairly well and to give satisfaction to Allen & Ginter.

Mr. Pollard wrote Mr. Krise, in a letter which has heretofore been filed in this cause and which is dated July 6, 1883, in which letter, among other things, he says, "Mr. Pope *are* satisfied with the cigarett-s. He says they are all right now." I see, by reference to our treasurer's account, that the royalty paid by Allen & Ginter for the cigarettes made on the machine in the month of July, 1883, was $414.00, which payment was made on the 11th day of August, 1883.

The first tube made by Mr. Pollard, as I understood from him, and which I myself saw on the machine on the 1st and 2d days of August, 1883, was like the tube filed in this cause marked X X X X X, and which is said to be the model tube for the Pollard patent, which tube then on the machine was the tube X filed in this cause, or one just like it.

194 Mr. Bonsack was then — Europe engaged in the introduction of our machines there, and I was anxious that Mr. Bonsack should have one of these tubes, and requested Mr. Pollard to make, as soon as he could, a tube of that pattern and send it to me to be forwarded to Mr. Bonsack in Europe. Some time thereafter Mr. Pollard sent me a tube having a closed spiral paper guide on the left-hand side just like the tube Exhibit X, which tube I immediately expressed to Mr. Bonsack in Europe. About the same time that I received this tube from Mr. Pollard I received from him the letter filed in this cause marked "Pollard's Letter No. 12," which letter is dated on the 24th of September, 1883, and in which, among other things, Mr. Pollard says:

"Mr. Strouse.

SIR: I send you the tube by express to-day. I reckon you think that I kept it a long time. I wanted to try it before I sent it to you, and I got my hand cut on the shifter, so I could not use it for three or four days."

In addition to these tubes, Mr. Pollard, in the latter part of November, 1883, made, as he represented to me, the tube filed in this cause as "Exhibit Tube," having straight, open slots. I am not sure, but I think Mr. Pollard left with Mr. Gibbs two tubes of this pattern.

5th Ques. by same. The witness Pollard, in answer to question 11, states that if any tubes were made at Gottendorf's "he did not know anything about it," and in answer to question 12 he (Pollard) says "he did not superintend the making of any tubes while at Gottendorf's;" that when "you came over and ordered Gottendorf to make some I (Pollard) objected to Gottendorf making them," &c. Please state whether or not this answer is correct, and any other matter pertinent to the same subject.

Ans. The facts in this matter are these:

Messrs. Gottendorf & Cie, in Paris, were constructing their first lot of machines for the Bonsack Machine Company, and early in January, 1884, Mr. Pollard was sent to Paris to superintend that work and to see that the machines were built well and properly, and to receive the machines when so built. Mr. Pollard carried from me to Messrs. Gottendorf & Cie a letter of authority, which letter, in addition to what I have above stated, directed Messrs. Gottendorf & Cie to make such changes in the machines being constructed as Mr. Pollard might require. Proceeding under this authority, Mr. Pollard made several changes in the machines, only two of which were of any importance. One of these changes consisted in a new pasting device and the other was in operating the cutter bed on upright steel springs instead of two bearings and a horizontal poise spring. The pasting device proved a failure and has been entirely discarded, and the other device is being abandoned. I do not at this moment remember the number of tubes which Messrs. Gottendorf & Cie were, under their contract, to furnish with each machine, but they were to furnish a number of tubes with each machine. I did not go to Europe until the month of May. On arriving at Gottendorf's factory I found on the machine Mr. Pollard's new pasting device and a tube similar to tube "X X X" filed in this cause. Mr. Pollard told me that he and Mr. Gottendorf had tried the machine on Sunday in the factory, and that it worked very well. A few days thereafter a number of gentlemen from a large government cigarette factory in Paris called to see the machine run for a short time in the shop, and at their instance we removed the machine to the government cigarette factory, where Mr. Pollard operated it for about three months. The tubes used by Mr. Pollard on that machine (of which there were several) were made of steel and were constructed with two open slots, being about such tubes as "tube X X X" exhibited in this cause.

195 I carried no tube with me to Europe nor any patterns, and it would have been impossible for me to have properly directed the construction of such tubes. Mr. Bonsack and myself had both insisted upon Mr. Pollard, before he left for Europe, to have the tubes made of steel; which both Mr. Pollard and Mr. Bonsack were confident could be done. While in Paris I gave no instructions whatever as to how the tubes should be made, Mr. Pollard only furnishing all the information relating thereto. Mr. Pollard was to go to Italy to run a machine there and I requested him very particularly to have proper tubes for that work, which he did. I requested Mr. Pollard to be very particular to see that the tubes being made by Gottendorf & Cie, of which they then had a large number constructed, were properly made. Mr. Pollard told me that he had looked through those tubes, and that in his judgment the great mass of them would not work, at least, without material alteration; and my recollection is that Mr. Pollard did alter each one of the tubes which he worked in the French factory. I never at any time heard Mr. Pollard make any objections whatever to the construction of the tubes by Gottendorf & Cie, or to their shipment to any

point, but, on the other hand, while Mr. Pollard remained with me in Europe he appeared to me to do all he could in every way to promote our interest.

6th Ques. by same. The witness Pollard, in answer to question 11, says that when the contract in writing of the 27th of December, 1883, between him and the Bonsack Machine Company was executed, that you, amongst other things, assured him of the fact that nothing therein contained in anywise interfered with what he (Pollard) termed "his patent." Please state whether or not Mr. Pollard can read and write; whether or not he read said contract for himself, and whether or not you made such representations, or in any other way misrepresented the terms of said contract.

Ans. Mr. Pollard can read and write, and did read the said contract for himself. As I have said before, after Mr. Pollard's assurances and his willingness to execute that contract, and considering the form of tube we were then using, I regarded it as wholly immaterial to us whether the patents Mr. Pollard had applied for were granted to him or not, and I may have said this much to Mr. Pollard. I made no representations whatever which could lead Mr. Pollard to think anything which was in any way inconsistant with the plain provisions of that contract.

7th Ques. by same. The witness Pollard, in answer to question 13, says that you offered him $1,000 and a larger salary if he would sign the "first contract," which he refused to do. Please state whether or not you made him such an offer.

Ans. Mr. Pollard is mistaken in this statement. I was anxious that there should be no question between Mr. Pollard and the company; and inasmuch as the contract between him and the company had not been committed to writing, I prepared an agreement which I regarded as containing the exact understanding between Mr. Pollard and myself; which paper was dated to correspond with the time of Mr. Pollard's employment by the company. This contract I submitted to Mr. Pollard with the request that he sign it; and I insisted that he should do so because we had employed him for the purpose of getting the machines out of the troubles it was in and adapting it to such work as would be acceptible to the manufacturers of cigarettes, and I referred to the fact that I had urged him to make a new tube, which he assured me he would do and did do, and that I had certainly not employed Mr. Pollard to go to Richmond and make improvements on the machine which should be solely for his benefit and not for ours. Mr. Pollard continuously said that he had no idea of antagonizing the Bonsack Machine Company, but that he would not sign the contract which I had prepared. If one word was said by me about increasing Mr. Pollard's salary on condition that he would sign the contract, I am wholly unable to re-
196 call it to my mind, and I feel quite sure that I would not have fergotten it. I did not make Mr. Pollard any offer of money to induce him to sign the contract. I asked Mr. Pollard what it was that he wanted of the Bonsack Machine Company, with a view of ascertaining what position he proposed to occupy in the matter toward the Bonsack Machine Company. Mr. Pollard replied

that his tube made a better cigarette than the Bonsack tube, and that the company ought to pay him extra for making it, or words to that effect. I asked him what pay he thought he ought to have, which question he did not answer. With a view to ascertaining what his opinions were, but in no sense as an offer, I asked him whether he would want as much as $500.00. He said he would not be willing to accept that. I then asked him whether he wanted as much as $1,000. He said that $1,000 would not be the proper compensation.

8th Ques. by same. The witness Pollard, in answer to the 16th question, states that "there are some eight or ten places on the machine I (Pollard) had at that time that sheet brass is used for. The pieces wear out. At that time these pieces were not properly fitted, and I (Pollard) got brass and refitted and made new pieces." What have you, if anything, to say regarding this?

Ans. The machine which Mr. Pollard had was one of the three first iron machines built. These three machines were built at the same time in Philadelphia, and were, so far as I know and believe, exactly alike. One of these three machines is now in the Lone Jack factory, in this city, and Mr. Bonsack and myself examined it yesterday. The brass on that machine consists as follows:

1. A very heavy brass chute, which, I suppose, would last for 50 years.

2. A small piece of brass, some ten inches long and an inch wide, which is not very durable owing to its being handled frequently.

3. A large hopper over the steel belts constructed of brass in an iron frame, which will last for many years.

4. Two pieces of sheet brass, one at each end of a large pin roller. The roller is intended to revolve entirely free from these pieces, and up to this time I have never known one of them to be worn out.

5. A concave cover over a wire brush, which is also without wear except at the ends, where it rests on a solid substance, and does not appear to be much worn.

6. A brass apron which hangs in front of the lower seat pin roller, and which is without material friction and very durable.

7. Two pieces of brass, one at each end of the rear pin roller. I am not certain that these last two pieces are of brass. I could not see nor can I think of any other sheet brass used on our machines except that above mentioned, and I have no idea that we have ever worn out any piece of it on any of our machines except the small piece named secondly, which by reason of frequent handling is sometimes broken.

I take it that the sheet brass which Mr. Pollard purchased and charged in his account was purchased for making tubes, which were then made entirely of brass except the piece of sheet silver which I see on "Exhibit Tube." Besides the sheet brass I see in the said account I also see two items for "material for making tubes."

Since giving the answer just above my memory has been refreshed, and I add there is a large brass apron in rear of the pin rollers which is very durable, and several very small pieces of sheet brass

underneath the upper side of the lower steel belt. These last small pieces are subject to friction and are not very durable.

Mr. Bonsack has also gone again to the Lone Jack factory with a view to more certainly determining the machine, and he says the machine to which I have referred is not one of the three machines made in Philadelphia, and that in making that statement I was mistaken.

The sheet brass on the machines made in Paris and in
197 Philadelphia being just about the same.

NOTE.—Counsel for complainant excepts to all of the above answer except the last paragraph and except the paragraph enumerating the different points in the machine on which sheet brass is used, on the ground that it is a mere repetition and that it contains exactly the same matter, with nothing new, as has already been deposed by the same witness in his answer to question 18 in the examination-in-chief of his original deposition.

Counsel for defendant replies that if the witness' memory had been refreshed by the contrary evidence of witness Pollard or other circumstances opportunity should have been extended to him to state the extent to which it had been refreshed; which was done, and he states his recollection of the matter now in the light of present circumstances.

Counsel for plaintiff rejoins that, notwithstanding the reply of defendant's counsel, he insists on his exception for the reason that, having had the opportunity given him, the witness has failed to show that his memory is as to any *any* single point refreshed or that he is able to state any new matter whatever.

9th Ques. by same. The witness Pollard, in answer to the 17th question, states, amongst other things, that when he refused to accept your offer for him (Pollard) to give up his patent that you at that time said, "We have got too much money to let any poor man beat us. If you (Pollard) do not take this I (Strouse) will have your patent stopped." Please state whether or not this is true.

—. Mr. Pollard is entirely mistaken in his statement. I had no way that I know of under the law to prevent or stop the issuance of his or any other patent; and the statement referring to Mr. Pollard as a poor man is contrary to my habit of life and is *is* total variance with my ideas of propriety.

10th Ques. by same. In question 17 of Pollard's said deposition you are quoted as follows: "Mr. Strouse testifies that this (meaning from $25.00 to $1,000 just above referred to) was offered you (Pollard), not in purchase of your right, but as a compensation for the extra time you have worked on the tube after working hours." Pollard was asked, "What have you to say as to this?" What have you to say as to this?

Ans. I don't think that I have ever testified as that question represents me to have testified. As to what I did say I refer to my answer to the 25th question-in-chief of my former deposition.

11th Ques. by same. The witness Pollard, in answer to 19th question, says, "I did not think that I was giving any license, or, in fact,

I didn't know anything about any license," referring to the contract of the 27th of December, 1883; also to his giving Thurman his instructions as to how to make the tube. Please state what your understanding of it was and the facts and circumstances which induced you to arrive at that conclusion.

NOTE.—Counsel for complainant excepts to so much of the above question or to any answer that may be given thereto that calls for or gives matters of opinion or conclusions reached by the mind of the witness.

Counsel for the defendant replies that the witness Pollard, in the 19th question, was asked if there was anything by which — "thought" he was giving, &c., to the Bonsack Machine Company a license; and the witness answered, stating what his understanding was. Now Mr. Strouse is requested to state his understanding.

Ans. My understanding on account of all that occurred between Mr. Pollard and myself subsequent to the occurrence in Richmond when he had declined to sign the contract I had requested him to sign was that Mr. Pollard would stand in with the Bonsack Machine Company—would antagonize it in no way whatsoever; that we had the right to use any tubes that he had made or might there-
198 after make, as we were then doing, without regard to any patent that might be issued, without any objection whatever showing Mr. Thurman how to make the tubes we were then using for us and executing the contract which he executed, by all of which he was reinstated in our confidence and sent to Europe on a most important mission, with broad powers to act for us.

12th Ques. by same. Mr. H. W. Gibbs, in answer to 10th question of his deposition, said that no tube like the tube "X X" was in use at Allen & Ginter's when he first went there (August 8th, 1883); that soon after a tube like that was used, except it had no slot through the bottom for the belt to pass. State anything you may have to say as to this.

NOTE.—Counsel for complainant objects to any answer that may be made by the witness to the foregoing question unless he file with his answer the paper now in his hands and from which he appears to have refreshed his memory.

Ans. I was in Richmond about August 1st, 1883, about September 5th, 1883, and about November 8th, 1883. On all of these occasions there was a tube on the machine like tube "X," filed in this cause, having a closed paper guide on the left side. I was in Richmond again about January 19, 1884, when I for the first time found on the machine a tube with open slots like "Exhibit Tube." Tubes like "X X" were made subsequent to this time and very soon thereafter.

The paper which I hold in my hand and which is referred to in the objection preceding this answer is simply a memorandum of the foregoing and several other dates which I made because I have a difficulty in recalling dates accurately.

13th question by same. The witness Gibbs says that you were at

Allen & Ginter's factory in 1884, about three months after Pollard had left for Europe, and that you tried to get him (Gibbs) to sign a certain paper, which he refused to because it was not just to Mr. Pollard, and that you thereupon got very mad. Please state fully as to this matter.

Ans. I knew from Mr. Pollard that in the latter part of 1883 he had made a tube with open slots like "Exhibit Tube," and it was tubes like that or like tube "X X" that Mr. Pollard had instructed Mr. Thurman to make and for which he had furnished Mr. Thurman the patents. I asked Mr. Gibbs when the tube with open slots like "Exhibit Tube" had first been made and put on the machine. Mr. Gibbs said they had been made and put on the last of November or the first of December, 1883. I took a little memorandum book out of my pocket and made a memorandum of that fact and asked Mr. Gibbs to sign it, which he declined to do, saying that he didn't want to have anything to do with it. As Mr. Gibbs was in our employment and as the memorandum I had asked him to sign was his own statement of a simple fact, I may have become vexed with him. Remembering afterwards that Mr. Pollard had for years been a friend to Mr. Gibbs and had gotten him the position which he then had, I realized that Mr. Gibbs would feel himself in a delicate position in the matter and so said nothing more about it. This occurred when I was in Richmond, about the 19th of January, 1884.

14th question by same. In answer to 4th question in cross-examination the witness Gibbs says that you did not write anything in your book in his presence, and that he did not tell you that tubes like "Exhibit Tube" were not made till the latter part of November or the first of December, 1883. What about this?

Ans. Mr. Gibbs is entirely mistaken in his statement. The facts were as I have stated them above.

15th question by same. The witness Gibbs, in answer to 13th question in cross-examination, says: "Mr. Pollard never made any tube like that 'Exhibit X' at Allen & Ginter's while I was there. I never worked a tube like 'Exhibit X' in the machine since I have been at Allen & Ginter's. I never complained to Mr. Strouse that tobacco got into the guide. I am never bothered with
199 that trouble." Please state anything you have to say relative to this.

Ans. Mr. Gibbs is mistaken in every one of the above-quoted averments, unless it be that Mr. Pollard did not make the tubes referred to at Allen & Ginter's. I have no doubt he made them at the shop which he had rented for that purpose.

NOTE.—Counsel for complainant excepts to so much of the foregoing answer as refers to the opinion of the witness and is not stated as a matter of fact.

16th question by same. Do you know who made the tube "Exhibit X," with spiral guides, or where it came from?

Ans. It was one of the tubes made by Mr. Pollard in Richmond. I *I* found it with several other tubes on a shelf near by the Bon-

sack cigarette machine at Allen & Ginter's, in Richmond, and brought it away myself about the 19th of January, 1884, and have kept it at my house, at Salem, Va., from that time until it was filed as an exhibit in this cause. We have never had any tube of this style made except those made for us by Mr. Pollard soon after he went to Richmond. I am not certain as to the date when I brought it, but think it was at that time.

17th question by same. To what extent, if any, is the tobacco compressed in the Bonsack machine when dropped from the hopper upon the belts before it enters the wrapping tube, and in what way, if at all, does the present arrangement differ from that used for the original Bonsack tube?

Ans. There is no difference between the present arrangement and the compressing arrangement which was used for the original Bonsack tube except that the presser wheel has been moved a little farther forward and is a little thicker than it was formerly.

I have never measured the extent of the pressure, but I think that the tobacco while passing under the presser wheel and before its subsequent expansion is probably reduced to less than one-third of the space it occupies in the steel-belt trough before it is compressed. The only difference between the operation of this part of the machine now and when the original Bonsack tube was used is that the original Bonsack tube required the tobacco to be more compressed than the tubes we now use require to be, and on this account the tobacco retained its shape more then than it does now, and hence the cigarettes made on our present tubes are more nearly round than those made on the original Bonsack tubes.

20th question by same. If you can recall any other matter as to which you have not testified, and which should be explained in rebuttal, please state fully as to the same.

Ans. In answering the question as to the number of tubes made by Mr. Pollard while he was in Richmond I intended to refer to, and now refer to, a letter written by Mr. Pollard to Mr. Krise, which letter has been filed heretofore in this cause, marked "Pollard's letter No. 1," and dated on the 14th of August. The year is not given in the letter, but it was 1883. In this letter, among other things, Mr. Pollard said: "Mr. Gibbs is getting along very well. I think that by the time that I get the work done on the machine that he will be all right. After I get him so as I can leave him I will make him another tube that will work better than the one we are working now."

I know of nothing else that I wish to be added.

NOTE.—Counsel for complainant objects to the quotation of the above letter for any purpose of proving that Pollard made any number of tubes, his words being "as soon as I can leave him I will make him another tube," the above quotation containing a future promise that has not been shown to have been fulfilled.

Cross-examined by counsel for plaintiff:

1st question by same. In your answer to question 2 in your

200 examination-in-chief you state: "We did not use the tube upon which he (Pollard) had applied for a patent." What do you mean by this?

Ans. I meant to say that we used tubes like the tubes exhibited marked "X X," and not those like the model tube "X X X X X."

2nd question by same. In your answer to question 3 you state that the sheet brass charged in Mr. Pollard's account was used by him solely in experimenting upon tubes of his own invention. Have you any evidence that no brass was used to remair Bonsack tubes or other portions of the machines requiring brass?

Ans. In looking over the answer referred to in the foregoing question I do not find that it contains any such statement as that made in the question.

3rd question by same. Do you state that that is not the inference that you desired to have drawn from the quotation of the account above referred to?

NOTE.—Counsel for the defendant objects that witness should not be required to state as to conclusions, but state facts and let the court draw the inferences.

Ans. The answer referred to states simple facts. These facts, taken together with Mr. Pollard's testimony that Mr. Pope would not have cigarettes that were made on the Bonsack tube and that the royalties paid us by Allen & Ginter for the cigarettes made during the month of July, 1883, amounted to $414.00, leads me to the conclusion that the large amount of sheet brass charged in Mr. Pollard's said account was used by him chiefly if not wholly in making such tubes as he did make to work successfully and acceptably to Mr. Pope.

4th question by same. How much time elapsed between your arrival in Paris in the spring of 1884 and your departure for Rome with Mr. Pollard?

Ans. I think a very few days. I cannot state accurately the length of time.

5th question by same. At that time what style of tubes were Gotendorf & Co. making?

Ans. I know of no other tubes being then made by Gotendorf & Co. except such as had open slots like tube "X X." I remember that in Rome we had three tubes on the machine which we exhibited there for a short time, one of which, as I remember, was made of steel, the other two were of brass. I remember distinctly Mr. Pollard returned to Paris in a few days, leaving me in Rome with a party whom I had employed to learn how to set up and operate our machines, and after Mr. Pollard left he and I concluded that we could make some improvements on the best tube Mr. Pollard had left with us by filing off one side of the tongue and we ruined the tube. It was necessary for Mr. Pollard to return speedily from Rome in order to place the machine in the cigarette factory in Paris as we had agreed to do.

6th question by same. You have stated that on your arrival in Rome you had three tubes. Is it not a fact that you had but one tube, that this tube was broken before you had the machine started,

and that it took you a day to prepare the tube before you were able to start the machine?

Ans. My recollection is that we had more than one tube, and I think we had three. One of the tubes would not work satisfactorily at all. The best tube we had made a slight wrinkle on the paper, and it was in an attempt to remove this wrinkle that caused us to ruin the tube. If we had but one tube, my memory is at fault.

7th question by same. Do you know what was the price of sheet brass in Richmond in the summer of 1883, during the period covered by Pollard's account quoted by you?

Ans. I do not. I have, however, had a statement made by those who are now making our tubes from which we estimate the
201 cost of brass and other material for tube like tube "X X" at 20 cents.

8th question by same. Do you not know that in the summer of 1883 sheet brass cost a great deal more than now?

Ans. I have no information on that subject.

9th question by same. In your answer to question 9 you state: "I had no way that I know of under the law to stop or prevent the issuance of his (Pollard's) or any other patent." Is it not a fact that shortly after you were informed of the fact that Pollard had applied for his patent that you applied for a patent upon a cigarette tube on behalf of yourself or the Bonsack Machine Company?

Ans. In examining the tube on the machine in Richmond having closed spiral guides like tube X, I ascertained from observation and from the statements of Mr. Gibbs that the said guides were apt to choke from accumulations of paste and tobacco, and, having a somewhat mechanical mind in studying up the tube, I came to the conclusion that a tube might be constructed with open slots by placing an independent tongue between the sides of the tube substantially as in tube filed marked "X X," and I did apply for a patent on a tube so constructed on 17th day of September, 1883. My application was subsequent to the application filed by Mr. Pollard on his tube and therefore could not have interfered with that application. Besides this, I regarded the tube for which I had applied for a patent as entirely different from that for which Mr. Pollard had applied for a patent. I subsequently told Mr. Pollard myself that I had applied for a patent on that form of tube.

10th question by same. What was the fate of that application? And, if abandoned, give your reasons for it.

Ans. There was some objections, as is usual, made by the examiner, and, Mr. Pollard having made the expression which I have before stated and directed the tubes we might need to be made for us and having signed the contract set up in this cause, I regarded the matter as of no further consequence and paid no more attention to it.

And further this deponent saith not.

D. B. STROUSE.

The further taking of these depositions is adjourned, by consent

of parties, till to-morrow morning, September 4th, 1890, at 9 o'clock, to be continued and conducted at the same place.

JOHN G. HAYTHE, *N. P.*

Deposition of James A. Bonsack.

JAMES A. BONSACK, being first duly sworn, deposes as follows:

1st Ques. by counsel for defendant. Are you the same James A. Bonsack who testified before in this cause?

Ans. I am.

2nd Ques. by same. Witness Cayce, in answer to question 3, on direct examination, states that he had several talks with you concerning Mr. Pollard's claim and that you acknowledged "the justice of Mr. Pollard's claim and said he (meaning Bonsack) had or would recommend to pay Pollard or compensate him." Please state whether or not you made these statements to Mr. Cayce or any one else.

Ans. Mr. Cayse is mistaken in this. I did not say to Mr. Cayce that I would "recommend" to the Bonsack Machine Company to *to* pay Pollard any thing or compensate him in any way for what he had done. I did have some casual conversation with Mr. Cayce relative to this matter, but never used any language that was intended to or would have conveyed the idea that I considered that the Bonsack Machine Company was under any obligations whatever to pay Mr. Pollard for any improvements that he had made on our machine. My understanding of the agreement or contract between Pollard and the Bonsack Company had always been that Pollard was to
202 give the company the benefit of any improvements that he might make on the machine. While I do not remember the exact words that I used on this occasion, I know that I merely meant to convey the idea that Pollard had taken great interest in the machine and that he had succeeded in getting the machine out of the trouble that it was in at Allen & Ginter's, and that I would, as a gratuitous gift, have given him something more than his regular wages.

NOTE.—Counsel for plaintiff excepts to that part of the above answer beginning at the words "my understanding" down to "might make on the machine." The understanding of the witness is entirely irrelevant when a written contract is in evidence to speak for itself.

3rd Ques. by same. Were you at the time of any of the several conversations above referred to an officer of the Bonsack Machine Company or a member of its board of directors?

Ans. I was not. I had no connection with the Bonsack Machine Company other than as a stockholder.

4th Ques. by same. In answer to question 4 of Pollard's deposition he states that "tube like Exhibit 'X' could not be made on a mandrel like the large mandrel filed as an exhibit in this cause, and that such mandrel could not be used in constructing such a tube." What have you, if anything, to say about this?

Ans. Mr. Pollard, in my opinion, is mistaken in this. While the spiral offset on the right-hand side of said mandrel would make it more difficult to make a tube with spiral closed guide on the left-hand side, still with exercise of a little patience and still it could be done, especially with the assistance of some other tools.

5th Ques. by same. The witness Pollard states that in making what he calls "his tube" he cut out a place in a block of wood tapered U-shaped, and hammered the tapered parts of his tube into this U-shape with a hammer. What have you to say about this?

Ans. It would have been totally impossible to have properly made a closed spiral guide tube like tube X with the use of no other tools than a block with a U-shaped tapering groove and a hammer.

NOTE.—Counsel for complainant excepts to the above question and answer and to *and to* any others that may be made of the same import unless the witness is first shown to be a mechanic with a thorough knowledge of the use of tools.

Counsel for defendant replies that it is shown by the deposition of Mr. Bonsack previously taken in this cause that he was the inventor of the Bonsack machine and a mechanical expert.

6th Ques. by same. The witness Pollard has testified that the only tubes he ever made were "Exhibit Tube," "model tube," marked "X X X X X," and the one he assisted Thurman in making. Please state whether or not this is correct, answering fully as to the same.

Ans. This is not correct. I left Europe about the 8th of November, 1883; and some time before I left there Mr. Strouse, the president of the Bonsack Machine Co., sent me a tube with a closed spiral guide on the left-hand side, that tube being like tube "X." Referring to a letter which was written by Mr. Pollard Sept. 24th, 1883, I quote as follows:

Mr. Strouse.

SIR: I send you the tube by express to-day. I reckon you think that I kept it a long time. I wanted to try it before I sent it to you. I got my hand cut on the shifter, so I could not use it for three or four days.

I also refer to a receipted bill, dated "New York, October 2, 1883," which I herewith file as a part of this record. The said bill is against the Bonsack Machine Company, debtor to R. K. Carter, 113 Chambers St. I find the following items recorded on bill:

"To forwarding package to Gortendorf & Co., Paris, France, value	$5 00
203 Addition express charges from Salem to New York city	60
Express from New York to Paris, prepaid	1 50
5 per cent. commission on $5.00	25
	$2 35"

of parties, till to-morrow morning, September 4th, 1890, at 9 o'clock, to be continued and conducted at the same place.

JOHN G. HAYTHE, *N. P.*

Deposition of James A. Bonsack.

JAMES A. BONSACK, being first duly sworn, deposes as follows:

1st Ques. by counsel for defendant. Are you the same James A. Bonsack who testified before in this cause?

Ans. I am.

2nd Ques. by same. Witness Cayce, in answer to question 3, on direct examination, states that he had several talks with you concerning Mr. Pollard's claim and that you acknowledged "the justice of Mr. Pollard's claim and said he (meaning Bonsack) had or would recommend to pay Pollard or compensate him." Please state whether or not you made these statements to Mr. Cayce or any one else.

Ans. Mr. Cayse is mistaken in this. I did not say to Mr. Cayce that I would "recommend" to the Bonsack Machine Company to *to* pay Pollard any thing or compensate him in any way for what he had done. I did have some casual conversation with Mr. Cayce relative to this matter, but never used any language that was intended to or would have conveyed the idea that I considered that the Bonsack Machine Company was under any obligations whatever to pay Mr. Pollard for any improvements that he had made on our machine. My understanding of the agreement or contract between Pollard and the Bonsack Company had always been that Pollard was to
202 give the company the benefit of any improvements that he might make on the machine. While I do not remember the exact words that I used on this occasion, I know that I merely meant to convey the idea that Pollard had taken great interest in the machine and that he had succeeded in getting the machine out of the trouble that it was in at Allen & Ginter's, and that I would, as a gratuitous gift, have given him something more than his regular wages.

NOTE.—Counsel for plaintiff excepts to that part of the above answer beginning at the words "my understanding" down to "might make on the machine." The understanding of the witness is entirely irrelevant when a written contract is in evidence to speak for itself.

3rd Ques. by same. Were you at the time of any of the several conversations above referred to an officer of the Bonsack Machine Company or a member of its board of directors?

Ans. I was not. I had no connection with the Bonsack Machine Company other than as a stockholder.

4th Ques. by same. In answer to question 4 of Pollard's deposition he states that "tube like Exhibit 'X' could not be made on a mandrel like the large mandrel filed as an exhibit in this cause, and that such mandrel could not be used in constructing such a tube." What have you, if anything, to say about this?

Ans. Mr. Pollard, in my opinion, is mistaken in this. While the spiral offset on the right-hand side of said mandrel would make it more difficult to make a tube with spiral closed guide on the left-hand side, still with exercise of a little patience and still it could be done, especially with the assistance of some other tools.

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Ans. This is not correct. I left Europe about the 8th of November, 1883; and some time before I left there Mr. Strouse, the president of the Bonsack Machine Co., sent me a tube with a closed spiral guide on the left-hand side, that tube being like tube "X." Referring to a letter which was written by Mr. Pollard Sept. 24th, 1883, I quote as follows:

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I also refer to a receipted bill, dated "New York, October 2, 1883," which I herewith file as a part of this record. The said bill is against the Bonsack Machine Company, debtor to R. K. Carter, 113 Chambers St. I find the following items recorded on bill:

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5 per cent. commission on $5.00	25
	$2 35"

I am entirely satisfied that this is the bill for the tube that Mr. Strouse sent me while I was in Paris. I remember distinctly that on the outside of the box it was marked "Value $5.00," and also that the date "October 2nd" corresponds with the time that I received said tube, taking into consideration the time necessary to deliver it in Paris. Previous to the time that I received the tube Mr. Strouse wrote me a letter, in which he said——

Counsel for complainant stops the witness to object to any reference to or quotation from the letter referred to without its production, and further objects to any letter from D. B. Strouse to witness as evidence against the plaintiff at all.

Witness, resuming, says that Mr. Pollard had succeeded in getting the machine to work pretty well and was making fairly round cigarettes, and that he would send me a tube like Pollard was using on the machine at Allen & Ginter's as soon as he could have Pollard make it.

NOTE.—Counsel for complainant renew and insist upon objection made while the foregoing answer was recorded, and again calls for the production of that letter if the same is relied on for any purpose.

7th question by same. State whether the letter referred to — or know where it is.

Ans. I have not the letter. I suppose I must have thrown it away. The letter at the time I received it seemed to be of no importance, and hence I did not keep it. I have made searches for it several times, but could not find it.

8th question by same. State whether or not you at any time gave instructions to Gortendorf & Co. how to make tubes like "X X X," filed in this cause.

Ans. I did not. I never saw a tube like "X X X" until after my return from Europe in the fall of 1883. I have not been to Europe since my return at that time.

9th question by same. State whether or not you gave Gotendorf & Co. any instructions relating to the making of the tube "X."

Ans. None whatever. I don't think I even so much as showed them a tube.

10th question by same. What time during the fall of 1883 was it that you returned from Europe and how soon thereafter, if at all, did you visit Richmond, Va.?

Ans. I left Paris about the 8th of November, 1883. I did go to Richmond immediately or within a few days after I got back.

11th question by same. State whether or — you called at the factory of Allen & Ginter while in Richmond; and, if so, state the character of the tube used on the Bonsack machine at that time.

Ans. I did call at the factory of Allen & Ginter when I went to Richmond on this occasion. In answer to question 50 in my original testimony I said as follows: "When I got back to America the company had already abandoned the Pollard tube or abandoned it so shortly after I got back, substituting the present style of tube or

rather present kind of tube, that the tube I brought back was never used."

At the time I gave this deposition my memory was not clear as to exactly what style of tube was used on the machine at Richmond at the time I was there, but in thinking over the matter I remember that the cigarettes they were making at that time — series of fine wrinkles near the left-hand edge of the overlap. These wrinkles were characteristic of the cigarettes made on the tube like Exhibit "X." This refreshes my memory as to the kind of tube that was then being used on the machine, and I can assert quite positively that the tube like "X," with a closed spiral guide on the left-hand side of the tube, was used on the machine when I was in Allen & Ginter's factory on this occasion.

204 12th question by same. The witness Pollard has testified that no tubes were shipped with machines from Gotendorf & Co. Please state whether or not you ever had any conversation with Mr. Pollard on that subject; if yea, state what Mr. Pollard said.

Ans. After I got back from Europe in the fall of 1883 I lived in Lynchburg for some months, doing business for the Bonsack Machine Company. During the fall or winter of 1883 I often talked with Mr. Pollard about the Bonsack machines. I was at this time strongly in favor of having tubes for our machine made of steel. This was one matter that I talked with Mr. Pollard about. He seemed to appreciate the benefit that our company would derive from having tubes made of steel instead of brass, we both regarding the steel tubes as wearing better than the ones made of brass. We were anxious to have them made of a more durable material. The steel tubes like "X X X" were sent from Paris by Gotendorf in fulfillment of his contract to furnish tubes, he having agreed at the time we contracted with him to make the machines to furnish him one or more tubes. The tubes he agreed to furnish us at that time were the original Bonsack tubes; but the ones that he did send, which were like "X X X," were furnished us in the place of the original Bonsack tubes that he was to make. I saw Pollard frequently after he had gotten back from Europe, and we had some conversation about the failure of our ideas as to the desirability of having tubes made of steel. While he did not say they were made at Gotendorf's, yet I am satisfied that such was the case.

13th question by same. The witness Pollard has testified that the — some 8 or 10 places on the Bonsack machine which he had at Allen & Ginter's on which sheet brass is used, and that the brass wore out rapidly. Have you anything to say relative to this?

Ans. The machine that was used at Allen & Ginter's at this time on which Mr. Pollard operated was one of the three original machines built in Philadelphia by Israel Johnson, Jr., & Co. These three machines were built very largely under my own supervision, and also under the constant supervision of a Mr. Joseph Horn, who had assisted me in making the drawings from the original wooden machine for the purpose of having iron machines built. This work was all done by labor paid for by the hour with the acception of some few immaterial parts. For this reason the work was done in

first-class style, no pains or money be spared to make them all right in every respect; not only for this reason, but for the reason that both Mr. Horn and myself took considerable pride in the work we had done, and we saw that everything was thoroughly and carefully finished and fitted. No machines that have been put up since that time are equal to the three machines built in Philadelphia. I have heard Mr. Gibbs, and I think Mr. Pollard also, state that the machine that Allen & Ginter had, which was built in Philadelphia, was a far better one than those built in Paris. I know of but two points about the machine in which there is any material *ware*. Those two points are the tube and certain small *peices* of brass (three in number, I think) which are riveted to the top of *a* cast-iron pushing *peices* which keep the broad steel belt up against the edges of the two narrow steel belts. I went with Mr. Strouse to the Lone Jack factory on the 2nd instant to examine the Bonsack machine, which was there and which was built in Philadelphia. We failed to look at the right machine. I afterwards thought I might have made some mistake, and returned there yesterday to see if such was the case. I found that we had examined the wrong machine. I then did examine the machine that was built in Philadelphia, and can assert with the greatest confidence that the original *peices* that were put on the machine when it left Philadelphia are still on it, with the exception of the cushion pieces under the steel belt.

14th question by same. State whether you know any reason why the brass on the machine at Allen & Ginter's should have worn more rapidly than the brass on the machine in the Lone Jack factory that you have just referred to.

Ans. I know of no reason whatever. All the parts of that
205 machine were, as I have stated, fitted with special care.

15th question by same. The witness Pollard has testified that he made "his tube" while in the employ of the Bonsack Machine Company and Allen & Ginter, but after working hours. State whether or not a tube can be constructed to make perfect cigarettes without experimenting or trying and testing the same on a machine.

Ans. It has been the custom for the Bonsack Machine Company to pay its employees by the week or month whether they worked full time or not, and they have never, so far as I know, paid for any extra hours that its employees might put in. I do not regard it as possible to make a tube that would make perfect cigarettes without trying such a tube from time to time on a cigarette machine.

16th question by same. Has the Bonsack Machine Co. ever worked steel tubes like "X X X" in the United States?

Ans. Never to my knowledge. The steel tubes that were sent from Paris were regarded as a failure.

17th question by same. The witness Gibbs has testified that no advantage is derived from the supposed flexibility of the small part of the tongue of the tube at present used in the Bonsack machine. What have you, if anything, to say about this?

Ans. Mr. Gibbs is mistaken in this. The flexibility of said small part of tongue as is now used in the Bonsack tube is of great im-

portance, as it yields to the pressure of any over-sufficiency of tobacco that may pass into the tube, permitting it very often to pass through without choking the tube or causing the paper to break.

18th question by same. State whether or not the small part of the tongue is susceptible of a horizontal or perpendicular adjustment so as to in any way to regulate the size of the cigarette.

Ans. The flexible finger, as is now used in the present tubes running on the Bonsack machine, is susceptible of both a horizontal and perpendicular adjustment. The perpendicular adjustment can be used especially to regulate the size of the cigarette to a very material extent. The horizontal adjustment is used to regulate somewhat the running of the paper—that is to say, if the right-hand edge of the paper should run too high the said flexible part or end of finger could be pushed towards the right-hand side of the tube, which would cause the said right-hand edge of the paper to run lower, and if the left-hand edge should run too high the adjustment of the small end of finger could be pushed towards the left-hand side of the tube, which would cause the left-hand edge to run lower. When I was in W. Duke, Sons & Co. factory in *in* Durham, N. C., in the summer of 1884 superintending the setting up and making the first Bonsack machine used there I used a U-shaped yoke that slipped over that portion of the tube at or near the small end of the flexible finger; which said yoke had a small thumb-screw in the top connection of the said U-shaped yoke. This thumb-screw was used for the purpose of adjusting the small end of the spring finger in a perpendicular direction for the purpose of regulating the size of the cigarette.

19th question by same. State whether or not you ever instructed Mr. Thurman as to how to make the Bonsack tube.

Ans. No, sir; I never gave Mr. Thurman any information whatever as to the construction of the original Bonsack tube. My information is that all the help he ever had in making said tubes was given him by my father, who was himself totally ignorant of the proper construction of my original tube.

20th question by same. Has it come — your knowledge why the machine at Allen & Ginter's just prior to and soon after the time the witness Pollard went there made imperfect cigarettes? If so, state.

Ans. My information is that the whole cause of the trouble was due to the tubes not being made in accordance with my original tube.

206 21st Ques. by same. By whom was that tube made? I mean the one then at Allen & Ginter's.

Ans. It was made by Mr. Robert Thurman.

22nd Ques. by same. The witness Gibbs has testified that the machine at Allen & Ginter's when he went there made a three-cornered cigarette. What have you, if anything, to say about this?

Ans. If such was the case they must have changed the compressing devices on the Bonsack machine, as I don't believe it would be possible to have made a three-cornered cigarette unless the compressing arrangement was altered so as to make the filler three-cor-

nered before its entrance into the wrapping tube. The original Bonsack tube could not possibly have made a three-cornered cigarette unless, as I have stated, the compressing arrangement had been so altered as to make the filler three-cornered.

23rd Ques. by same. The witness Gibbs, in answer to Ques. 83 on direct examination, says: "He (you) talked to me (Gibbs) one day. He (you) told me (Gibbs) it was a good thing I (Gibbs) did not testify, for if I had the company (the Bonsack Machine Co.) would not have kept me. Please state whether this is true.

Ans. This is not true.

24th Ques. by same. State whether or not you know why the witness Gibbs was not called as a witness for and on behalf of the defendant in this cause.

Ans. I had some conversation with Mr. Gibbs relative to this suit. Mr. Gibbs told me that Pollard had used the material, tools, and time of the Bonsack Machine Company in making the tube that he had patented, but that he was a friend of Pollard, and that Pollard had control of the machine cigarette department at Allen & Ginter's and that Allen & Ginter were in sympathy with Pollard in this suit, and that he did not care to testify on account of his friendship for Pollard, and also fearing that he might be turned out of the factory through Pollard's influence with Allen & Ginter. For these reasons Mr. Gibbs said that he would rather not testify, and the Bonsack Machine Company, in deference to his wishes, did not call upon him to give his testimony.

NOTE.—Counsel for complainant excepts to the above answer because the plaintiff cannot be prejudiced by anything that the witness Gibbs may be said to have stated in the absence of the plaintiff himself and in the absence of any foundation having been laid for this sort of question when the defendant had the witness Gibbs under cross-examination, and for other reasons.

25th Ques. by same. In whose employ was the witness Gibbs in March, 1890?

Ans. He was in the employ of the Allen & Ginter branch of the American Tobacco Company.

26th Ques. by same. The witness Pollard has stated that Mr. Pope, of Allen & Ginter, was written to to supply his (Pollard's) attorney with money relative to the procurement of his (Pollard's) patent. Please state what, if any, relation Allen & Ginter sustains to the American Tobacco Company.

Ans. The American Tobacco Company is composed of the five largest cigarette manufacturers in the United States, and the firm of Allen & Ginter is one of these five manufacturers.

27th Ques. by same. State whether or not you have read the deposition of Witness Newbury.

Ans. I have.

28th Ques. by same. State to what extent, if any, you concur with the said Newbury in the statement that the Emory device for the making of cigarettes fully covers all that is claimed in the Pollard patent.

Ans. I fully agree with Mr. Newbury that the Defendant's Exhibit of Emery Model does fully cover the claims in Pollard's patent.

207 NOTE.—Counsel for complainant excepts to the above opinion of the witness and to any that may follow on the same subject, he not having been shown to be, nor is he in fact, an expert in patent matters, qualified to render opinions upon or to distinguish between matters and questions affecting different patents.

29th Ques. by same. State, if you know, who, at the present time, owns the Emery device and letters patent, as shown by the Defendant's Exhibit "Emery Model."

Ans. The Bonsack Machine Company is the owner.

30th Ques. by same. The witness Thurman states that the original Bonsack tube is not a compressing and wrapping tube, but simply a wrapping tube. What have you to say about this?

Ans. Mr. Thurman is mistaken in this. The Bonsack tube both compressed the tobacco and wrapped the paper around the same as it was carried through the tube. It did not compress quite so much as the tube Pollard patented, but it did compress the tobacco to a certain extent.

31st. Ques. by same. Witness Thurman says that the Emery tube, as illustrated by the model aforesaid, is simply a wrapping tube, and not a compressing and wrapping tube. What have you to say about this?

Ans. Mr. Thurman is mistaken in his assertion as to this. This wrapping or rolling device, marked "Emery Model," will both wrap the paper around the tobacco and compress the tobacco somewhat while it is being wrapped, neither edge of the paper being exposed to the tobacco, it being allowed to run free and being guided & forced around the tobacco by the guide grooves just the same as is done in the Pollard patent. The tobacco can be drawn in without the pressure of the tobacco interfering with the lapping of the paper; but by reason of the little filler guide trough extending into the wrapping tube, and somewhat by reason of the top of the wrapping tube not being covered over, the amount of compression that is done in the tube that Pollard patented could not be done in this wrapping device. The amount of compression that this tube could perform is materially aided by the fact that Emery runs his fibrous tobacco, of which cigarettes we- made, through but one set of feeding devices. For this reason the length of the fiber is not so much damaged, therefore leaving the tensile strength of the filler greater than when it is run through two sets of feeding devices, as is done both in the Bonsack machine and the machine patented by Oscar W. Allison, which run in the Kimball factory, Rochester, New York. The fibers of the tobacco, of which the filler is formed, thus being left materially longer, will stand greater strain than a filler made by running through two sets of feeders. Therefore some compressing could be done with this wrapping device, as operated on the Emery machine. This wrapping device would make both a round and

smooth cigarette, equal to, if not better than, the tube patented by Pollard.

31st Ques. by same. You are here shown the tube filed in this cause, designated as "Defendant's Exhibit Newbury's Illustrated Model." Please state whether or not you have examined and considered the same; also whether it is such a tube as will work well and make good cigarettes.

NOTE.—Counsel for complainant excepts to the above question and any answer thereto on the ground that it calls for an expression of opinion of what the witness is not shown to have ever seen in practical operation.

Ans. I have studied and examined the said model, and state with the greatest confidence that such a tube would work with as much satisfaction as the tube now used on the Bonsack machines.

32nd Ques. by same. State whether or not said tube embraces any part of the Pollard patent. If so, what part?

NOTE.—Counsel for complainant objects to the above question and any answer thereto on the ground that the witness has
208 not been shown to be an expert in patent matters, and is therefore not qualified to make comparisons of different inventions or to express any opinion thereon.

Ans. This tube has a partial guide, a partial slit, on the right-hand side, the same as the Pollard patent, which partial guide and partial slit are also shown in tube "X X X X;" but on the left-hand side of Newbury illustration model there is no guide whatever from where the trough terminates and the large end of tapering part of tube begins. The paper is allowed to run freely through an open slot, not being forced or guided, as Pollard claims. In fact, the left-hand wall of Newbury illustration model is cut entirely away on a line with the lower left-hand edge of steel spring finger, and therefore it could in no sense perform what Pollard claims as the office of his left-hand guide—that is, to force the left-hand edge of the wrapper under so that *that* the first edge will overlap the same, as set forth.

Cross-examined by counsel for complainant:

1st Ques. by same. When and where were you educated as a mechanical engineer?

Ans. I have never been educated in any technical school, but what education I have in this line has been gained through a constant experience for the last 13 or 14 years with various kinds of machines and inventions, and also through contact with some of the best mechanical engineers in this country; and I have had considerable experience in building various kinds of machinery.

2nd Ques. by same. Please explain what "other tools," as stated in your answer to question 4, could render assistance in the making of the Pollard tube on the large mandrel.

Ans. I would want the assistance of pliers or pincers and preferably a short, straight mandrel. There might be other tools I would need, but I don't remember them.

3rd Ques. by same. Which tube did you hold in your hand and refer to when you stated that Pollard could not have hammered it into shape by the use of a block with a U-shaped tapering groove?

Ans. I was referring to tube "X."

4th Ques. by same. Please look at tube called "Exhibit Tube" and state whether you also think Pollard could not have made it by the U-shaped groove referred to.

Ans. This tube, "Exhibit Tube," which I now have in my hand could possibly have been made with a specially constructed hammer and a block with a U-shaped tapering groove, but I assert with confidence that no person pretending to understand the use of tools would have started out with only such tools as Mr. Pollard states he used in making this tube. I am not certain, but I don't think that I ever saw a hammer that could have been used for this purpose, although there may be such. I think, in fact am very confident, that as good a mechanic as Mr. Pollard is would have provided himself with tools other than he has named.

5th question by same. Have you ever seen a machinist paeve hammer? (I don't know that the word is correctly spelled.)

Ans. Yes; I have seen such a hammer.

6th question by same. Will you assert that it was impossible for Mr. Pollard to do this work by means of such a hammer, and is not such a hammer made for just such a purpose?

Ans. I assert that it would be impossible to make such a tube as "Exhibit Tube" with any "peaving" hammer that has ever come under my observation, although I cannot say there are no hammers that could be used for this purpose.

7th question by same. I repeat my question as to whether such a hammer is not made for just such a purpose as above described.

Ans. I have never seen any such hammers, but I cannot say that such hammers have not been made.

209 8th question by same. The first part of my 6th question was directed to ascertain whether, with the tool designated, Mr. Pollard could not have made the tapering part and not the whole of "Exhibit Tube." What is your opinion as to this? Upon your own request I explain my question so far as to say that it is directed to the trough and tapering portion and not to the cylindrical and circular portions.

Ans. I had heretofore understood the counsel for plaintiff to having referred in the above question only to the tapering cylindrical part. If, as he now asserts, he refers to the trough as well, it would be utterly impossible to make it at all with only a U-shape-tapering former and a hammer. I don't care what kind of a former or hammer he may have had.

9th question by same. Is it not a fact that Mr. R. W. Thurman, who made tubes for the Bonsack Co. for several years and who was as expert a mechanic in this respect as the company could at that time find, used what may be described as a block of brass with a U-shaped spiral groove, upon which, by means of a plain (without any groove or flange as in large mandrill filed) mandrill, he hammered the different sections of his tube?

Ans. Mr. R. W. Thurman has made a good many tubes for the Bonsack Machine Company. He did use a block with a U-shaped groove, but no block with a U-shaped spiral groove in it that I have ever seen, but he always had other tools than those mentioned. I will not be positive, but I think that he laid the blank pieces of brass for forming the tapering portions of the tube with spring finger inserted between, and also the spring finger itself over the said U-shaped groove in block, and with the assistance of a hammer and mandr*i*ll or other suitable tools to take the place of the mandr*i*l, and by hitting on said mandr*i*l or other suitable tool he forced the blank pieces of brass down into the U-shape-groove in block. He could never have made the trough by such means alone. He would have had to use some other tool over which to form the guide edges. The mandr*i*l or other suitable tool had no such offset or groove as the large tapering mandr*i*l exhibited in this cause. He may have first partially formed up the U-shape-tapering piece with spring finger between and also the spring finger itself and afterwards finishing them in the U-shaped converging groove or grooves in block, but I am not positive as to this.

NOTE.—Counsel for complainant inserts in the record for the benefit of the witness and all others concerned that his intention in framing the 9th question was to use the words "U-shaped tapering groove" instead of "U-shaped spiral groove."

10th question by same. In favor of what style of tube had the Bonsack Company abandoned the Pollard tube on your return from Europe? You can refer, if you choose, to your answer to the 11th question in your examination-in-chief.

Ans. The tube that Pollard patented was still running on the machine at Allen & Ginter's when I was there in the fall of the year of 1883.

11th question by same. What style of tube did the Bonsack Company substitute for the Pollard patent?

Ans. They substituted tube like "X X."

12th question by same. Is not the left-hand spiral guide alluded to by you in your answer to the 11th question to be found in the model tube "X X X X X" as well as in Exhibit "X"?

Ans. Yes.

13th question by same. Please explain the difference between a "slit" and a "slot."

Ans. I don't know that there is any difference. I think that they are very often used as synon*i*mous terms.

14th question by same. Have you yourself in your deposition just given used these words as synon*i*mous terms or as having a distinction?

Ans. I think I have used them as synon*i*mous terms.

210 15th question by same. Will you explain the difference in meaning attached by you to the words "groove" and "slot"?

Ans. I think I have used them, if at all, as meaning about the same thing.

16th question by same. You said that the three original machines

made in Philadelphia were constructed without regard to expense and in a most careful manner, and negative thereby Mr. Pollard's statement that as the machines were not well fitted the brass pieces were at first more liable to wear. Is it not a fact that Messrs. Ettinger & Edmunds, of Richmond, had to do and did do at least three hundred dollars' worth of work towards fixing that machine that went to Richmond before it would do reliable work, and did not Messrs. Cleland & Son, of Lynchburg, also have to repair one of these three machines upon its return from Cuba, and did not both of these firms have to make a great many changes on the two machines before they could be made to work satisfactorily?

Ans. I do not know whether Ettinger & Edmunds or any other firm in Richmond did the work for the changes Mr. Pollard had made on the machine that was sent there from Philadelphia. Somebody did the work, but I do not know who, what it cost. There were on changes whatever made on the machine sent from Philadelphia that were at all necessary. If I had been present in person and had put on a properly made original Bonsack tube there would have been no difficulty whatever in making cigarettes that suited the firm of Allen & Ginter as well as the cigarettes made on the old wooden machine that I had at Allen & Ginter's, I think, in the summer of 1881. When I built the iron machines in Philadelphia I changed these machines in several mechanical respects from the wooden machine. The mechanism on the Bonsack machine known as the "reciprocating rotary belt" was driven by belt motion on the wooden machine. This motion on the iron machine was driven by shafts & gearing on the side of the machine. One of the changes I think Mr. Pollard made, but am not positive—at least such change was made by some one in Richmond—was to take off the side gearing and shafting and substitute the belts and pulleys similar to the arrangement that I had on the wooden machine. He also put a larger worm and worm wheel on the machine to drive the front feed-rolls. He also changed the length of the arms that hold the presser wheel and other parts about the machine. There was nothing on the machines made in Philadelphia that he took off and had made over that was in anywise essential to the practical operation of the machine or to the making of entirely marketable cigarettes. The changes that Mr. Pollard made were also put on the machine at the Lone Jack factory; not that they were necessary to the practical operation of the machine, but because of their greater convenience; and the charges for work done by Messrs. Cleland & Sons were largely for such changes. In no respect whatever was it necessary that such changes should be made, only for the reason I have said of their being more convenient. Their was no brass used about any of the parts that Mr. Pollard changed, with the exception of a cap over the side gearing already referred to. This cap was removed and never replaced. I was superintending the alterations on the Bonsack machine that was made in Philadelphia and which was in the Lone Jack factory, and not one piece of brass that was put on the machine in Philadelphia was removed from said machine, with the exception of the cap above referred to; and every piece of sheet

brass that is now on the Philadelphia-built machine in the Lone Jack factory I confidently believe was placed there when the machine was built, with one or two immaterial exceptions.

16th question by same. Do you mean to assert, as you appear to do in your answer to question 31, that you can tell by looking at it and before testing it on the machine whether a tube will do effective work?

Ans. Having made many original Bonsack tubes, and having had a number of years of experience with the Bonsack machine, I think that I can assert with much confidence that a tube cut down on the left-hand side like Newberry illustration model would work with entire satisfaction.

211 17th question by same. Have you ever seen a tube that was so cut down work satisfactorily?

Ans. I never have.

And further this deponent saith not.

JAS. A. BONSACK.

Deposition of J. McH. Peters.

J. McH. PETERS, being next duly sworn, in answer to questions desposes as follows:

1 question by counsel for defendant. Are you the same J. McH. Peters who formerly testified in this cause?

Ans. I am.

2nd question by same. What connection, if any, did you have with the employment of Mr. E. T. Pollard by the Bonsack Machine Co. in 1883? State fully.

Ans. I met Mr. Pollard about the corner of 7th and Main streets in 1883, and he stated that he wanted to get a position with the Bonsack Machine Co. I told him that while I knew Messrs. Krise and Otey that I was not at that time intimately acquainted with them. He said he thought I could get him the position through Major Flood, and on my return to the factory I had a talk with Major Flood in regard to it. He went at once to see Messrs. Krise and Otey. He saw Mr. Krise, but I don't know whether he saw Otey or not, and on his return said that Mr. Krise or whoever he saw said that he did not like Mr. Pollard' habits; that he drank too much. I then insisted to Major Flood that they ought to employ him; that he was a good mechanic. I afterwards saw Mr. Pollard and stated what the parties had said to Major Flood. He said that we could get him in, and went with me to our office to talk with Major Flood. The matter was again discussed, and Major Flood again went to see Krise and Otey and had another talk with them. Mr. Pollard was afterwards employed by the company.

3rd Ques. by same. Through whose instrumentality was he employed?

Ans. I suppose it was through the instrumentality of Maj. Flood and myself, as we were the ones who introduced him.

4th Ques. by same. How soon was he employed?

Ans. I don't recollect. It was in a short time; perhaps, right away.

5th Ques. by same. Mr. Pollard, in his recent deposition, testifies that he never said to Maj. J. H. Flood "or any one else" he (Pollard) thought that the improvements that he could make upon it (meaning the Bonsack machine) would be worth more to the company than his salary, and that he would make very material improvements on it if they would give him the position. Please state whether you ever heard Mr. Pollard make any such remark; if so, where, when, and under what circumstances did he make it?

Ans. My recollection is that he did make that assertion. It was in our office at this interview above referred to, and that was the plea under which he thought we could get him into the company, viz., that he could make some improvements. He said that he thought he could make improvements on the machine.

6th Ques. by same. State whether or not you, in behalf of Mr. Pollard, had any conversation with Mr. Strouse, the president of the company, touching Mr. Pollard's employment; and, if so, state what inducements, if any, you held out to Mr. Strouse in favor of such employment.

NOTE.—Counsel for complainant objects to the above question and any answer thereto on the ground that complainant Pollard, not being shown to have been present at any such interview, if it actually took place, cannot be bound by what passed between the witness and the president of the defendant Co.

212 Counsel for defendant replies that the proof in this cause shows that the witness was requested by Mr. Pollard to intercede for him in securing the position with the Bonsack Machine Co.

Counsel for complainant rejoins that witness may testify as to what he himself said, but not specially as to what Mr. Pollard would do if employed.

Counsel for defendant answers that if he was acting for Mr. Pollard, as the proof shows to be the fact, he may testify, not only to what he did and said, but likewise as to what was done and said by the other party.

Ans. I couldn't say positively. I talked with Mr. Strouse about it, but don't recollect whether it was before Mr. Pollard's employment or afterwards. I never talked with him (Mr. Strouse) before this meeting at our office. After Mr. Pollard's interview at our office Maj. Flood took charge of the negotiation.

7th question by same. State whether or not you had any interview with Maj. Flood other than the one at which you mentioned Mr. Pollard as being present, the object of which was to get Maj. Flood to secure the employment of Mr. Pollard by the company. If so, what facts, if any, did you urge in Mr. Pollard's behalf in favor of such employment?

Ans. Yes; we discussed the matter several times—I couldn't say how often—and I urged or insisted that he would do all he could for

Pollard, believing that he would be of great benefit to the company. I recollect that I used this as an argument, that he had fitted our factory in Liberty, and that he made us double corks to retainers, and that he had never had any experience or done any such work before, that it was the first job he had undertaken. They were finished in good style, and proved to be all right. It requires a good workman to make these corks, or somebody that has had experience. After that I thought he could do almost anything he wanted to.

8th question by same. State whether or not, in your conversation with Maj. Flood, you recommended him to be a suitable man to run the machine, or to make improvements on the machine, or either.

NOTE.—Counsel for complainant objects to the above question on the ground that it is a thinly *vellio* leading question and suggest the kind of answer desired.

Ans. I thought that Pollard would be able to make some improvements and run the machine too, as he (Pollard) believed he could.

9th question by same. Mr. Pollard, in the same deposition, states: "I (Pollard) was not acquainted with Maj. Flood nor never had spoken to him until the day I started for Europe, Mr. Krise then introducing me to Mr. Flood as one of the Bonsack owners; that is the first and last time I ever saw Mr. Flood to know him." Upon the supposition (the same being a fact proved in this case) that Mr. Pollard left for Europe on or about January 1st, 1884, is his assertion as to his acquaintance true or untrue?

Ans. He had met Maj. Flood before that. I *I* commenced fitting up a factory in Lynchburg for manufacturing plug tobacco in the year 1880. Mr. Pollard did work for me. Before I finished fitting up Maj. Flood joined me, and I am under the impression that he met him then, and that he did meet him at our office during this interview before mentioned.

8th question by same. When at your office, in the presence of Maj. Flood, Mr. Pollard spoke of the improvements he could make in the Bonsack machine, what response, if any, did Maj. Flood make as to the subject of improvements?

Ans. My understanding was that the inducements he offered to get a position with the Co. were that he thought he could make some improvements on the machine, and that these improvements belonged to the company. Maj. Flood said to him that if they employed him any improvements that he made belonged to the company, and he replied that was the way he expected to get in.

9th question by same. What was Maj. Flood's relation to the Co. at that time?

Ans. I don't recollect whether he was a director or not; I know he was a stockholder.

213 10th question by same. State whether or not Maj. Flood was sometimes or frequently consulted by D. B. Strouse, president, or other officers of the company as to matters pertaining to the company.

Ans. Mr. Strouse came to see us nearly every time he came to

Lynchburg, and talked about the machine and its affairs. That is about as much as I can say.

And further this deponent saith not.

J. McH. PETERS.

The further taking of these depositions is adjourned until to-morrow morning, September 5th, 1890, at 9 o'clock, by consent of parties.

JOHN G. HAYTHE,
Notary Public.

Present: R. G. H. Kean, for complainant; absent, Mr. Peploe.
A. H. Burroughs, for defendant.

JOHN H. FLOOD, being next duly sworn, deposes as follows:

1st Ques. by counsel for defendant. Are you the same Maj. J. H. Flood who previously testified in this cause?

Ans. I am.

2nd Ques. by same. Mr. E. T. Pollard, the complainant in this cause, in his recent deposition testified as follows: "I was not acquainted with Mr. Flood, nor never had spoken to him until the day I started for Europe, Mr. Krise there introducing me to Mr. Flood as one of the Bonsack owners. That is the first and last time I ever saw Mr. Flood to know him." Upon the supposition that Mr. Pollard started for Europe on or about January 1, 1884, state whether his assertion as to his acquaintance with you is true or untrue.

Ans. I had met with Mr. Pollard once or twice prior to that time at Mr. Peters' factory, on Clay St. I afterwards met with him at the office of Peters & Flood, on Main St., where he came to talk with me about securing a position with the Bonsack Machine Company.

3rd Ques. by same. The witness Pollard, in the same deposition, states that he never said to you "or any one else" that he (Pollard) "thought that the improvements that he could make upon it (meaning the Bonsack machine) would be worth more to the company than his salary, and that he would make very material improvements on it if they would give him the position." Please state whether or not this is true, and fully as to what he said, your reply thereto, and the efforts, if any, put forth by you in consequence of that conversation, and the result of such efforts.

Ans. Mr. Pollard's denial of my statement in my former deposition is untrue. Mr. J. McH. Peters applied to me to secure a position for Mr. Pollard with the Bonsack Machine Company, representing him to be a competent man to run the machine and possessing such skill and talent of an inventive character that he thought he (Pollard) would make a valuable man for them. I said to Mr. Peters that I would like to talk with Mr. Pollard before taking any steps towards securing him the position, and he came with or was brought by Mr. Peters to the office of Peters & Flood to see me. My conversation with Mr. Pollard soon satisfied me that he was a competent man for the business, and upon his promising to give the

Bonsack Company the benefit of his skill in improving the machine I agreed to try to secure him the position. I at once proceeded to the office of the company and recommended the employment of Mr. Pollard. Mr. Krise replied that he wasn't the kind of man they wanted, that he was a drinking man or engaged in the bar-room business. I reported that fact to Mr. Peters, and, after a further conversation with him and Mr. Pollard, returned to the office of the company, stated to Messrs. Krise and Strouse, the latter being then president, that I thought they were mistaken, from the best information I could get, as to the drinking habits of Mr. Pollard, and insisted upon their employing him, stating that I believed
214 him to be a more competent man than they could generally find and that his inventive genius would be very valuable to them. They then agreed to employ him.

4th Ques. by same. State whether or not in your interview with Messrs. Krise and Strouse you were authorized by the said Pollard to make any representations as to whom the improvements would belong in case he was employed and made any, and whether or not you made any such representations to them.

NOTE.—Counsel for complainant excepts to the foregoing question, 1, because it is leading; 2, because, having already called for a full statement of what passed on the occasion referred to, the question is an effort to add to the full statement an interpretation of the legal effect of the facts already stated by the witness.

Ans. From the conversations Mr. Peters and I had with Mr. Pollard and his promises to give the Bonsack Co. the benefit of any improvements he should make upon their machine, I felt authorized to make such a pledge for him to the officials of the company, and I did so.

5th Ques. by same. What was the result of your interview?

Ans. He was employed by the company—that is, they promised me to employ him. What they did afterwards I can't say.

And further this deponent saith not.

JNO. H. FLOOD.

P. A. KRISE, being next duly sworn, deposes as follows:

1st Ques. by counsel for defendant. Please state whether you are over twenty-one years of age, your residence and occupation.

Ans. I am over twenty-one years of age; residence, Lynchburg, Va.; occupation, banker.

2nd Ques. by same. The witness Gibbs, in his deposition of the 10th of March last, was asked the following question: Did you (meaning Gibbs) on Tuesday of last week, in the office of Allen & Ginter, voluntarily say to P. A. Krise that you (Gibbs) knew nothing about this case and did not know why your deposition was to be taken?" and he replied thereto as follows: "No; I did not. Mr. Krise asked me what I knew about the matter, as he understood my deposition was going to be taken. I told him I was down here at the time and knew all about it. He said, 'Well, what you know about it don't amount to much probably." I said no, I guess

not. This was all I said about the matter." Please state whether or not Mr. Gibbs is in error.

Ans. My recollection of the matter is that Mr. Gibbs is in error.

And further this deponent saith not.

P. A. KRISE.

E. L. BELL, being next duly sworn, deposes as follows:

1st Ques. by counsel for defendant. Please state your age, residence, and occupation.

Ans. Age, 47; residence, Lynchburg, Va.; occupation, hardware merchant.

2d Ques. by same. Please state, if you know, the present retail price of sheet brass.

Ans. I do not know the present retail price of sheet brass. We do not retail any goods ourselves. I would say from my general information that the present retail price for ordinarily thick brass would be about 26 to 28 cents per pound. The wholesale price for it now would be about 24 cents. Prices vary a great deal, according to thickness or gu*a*ge.

3rd Ques. by same. Please state how the present prices compare with those of 1883.

Ans. I think, perhaps, present prices are higher than in 1883 by from 5 to 10 per cent.

And further this deponent saith not.

E. L. BELL.

215 G. W. ARGABITE, being next duly sworn, in answer to questions deposes as follows:

1st Ques. by counsel for defendant. State your age, residence, and occupation.

Ans. Age, 30 years; residence, Lynchburg, Va.; occupation, machinist.

2nd Ques. by same. State what, if any, opportunity you have had to familiarize yourself with the Bonsack machine and the practical working of the same.

Ans. I have had nearly two years' experience in handling the machine as operator and foreman in the factory, during which time I have given the machine and its working my undivided attention.

3rd Ques. by same. You are here shown the tube filed in this cause designated "Defendant's Exhibit Newbury's Illustrated Model." Please state whether or not you have examined and considered the same; also, whether it is such a tube as will work well and make good cigarettes.

Ans. My belief is that this tube will work when adjusted on the machine. I have examined the tube mentioned in the foregoing question.

4th Ques. by same. Give your reasons for believing that it will work well and make good cigarettes.

Ans. I have experimented with a tube, in my judgment, like the

tube shown me, and found it would work satisfactorily and make good cigarettes.

5th Ques. by same. Have you the tube that you experimented with? If so, file the same as "Illustrative Model Tube No. 2" with your answer to this question, and state when you experimented with it and when and by whom, if at all, the left-hand side of the tapering wrapping part of the tube in which the flexible tongue is inserted was cut down.

Ans. I have it and file the same as requested. I experimented on the morning of September 5th, 1890 (to-day). The left-hand side of the tapering wrapping part of the tube in which the flexible tongue is inserted was cut down this morning by myself.

6th Ques. by same. Witness Gibbs states that the small part of the tongue as in tube "X X" is not susceptible of horizontal or perpendicular adjustment so as to be of practical benefit in the making of cigarettes. Please state anything you may have to say as to this.

Ans. It is susceptible of horizontal and perpendicular adjustment. It is so susceptible of these adjustments as to be of practical benefit in the making of cigarettes.

7th Ques. by same. Please state whether or not you have any of the cigarettes with you made on the Bonsack machine with tube marked "Illustrative Model Tube No. 2"? If so, file the same with your answer to this question as "Cigarette Exhibit No. 1."

Ans. I have such cigarettes, and I herewith file the same as requested.

Cross-examined by counsel for complainant:

1st Ques. by same. In what respects besides cutting away the "left-hand side of the tapering wrapping part of the tube," just filed by you as Illustrative Model Tube No. 2, did you modify or add to the tube as it was before your alteration?

Ans. I soldered two braces extending from the top of the tongue to the right-hand side of the tube, one being of brass and the other of iron or steel wire.

2nd Ques. by same. What is the function of these braces, and why were they put where they are?

Ans. To keep the tongue in the position it occupied before I did the cutting.

3rd Ques. by same. How long a time did you use this tube, so modified, in making cigarettes?

Ans. Long enough to make about 200 cigarettes; not more than 5 minutes.

4th Ques. by same. Was the performance of this tube during
216 that experiment, as compared with its performance before you made the alteration described, such as to indicate to your mind that in its present condition it is as useful as in its former condition?

Ans. Yes, sir.

Re-examined by counsel for defendant:

1st Ques. by same. State whether or not the wire and brass piece, which you say you put on tube marked "Illustrative Model Tube, No. 2," before cutting away the left-hand side of the wrapping tapering part in any way operate as a guide for the paper on the left-hand side.

Ans. None in the world.

And further this deponent saith not.

G. W. ARGABITE.

STATE OF VIRGINIA, *City of Lynchburg,* } *To wit:*

I, Jno. G. Haythe, a notary public in and for the city aforesaid, in the State of Virginia, do certify that the foregoing depositions of D. B. Strouse, James A. Bonsack, J. McH. Peters, Jno. H. Flood, P. A. Krise, E. L. Bell, and G. W. Argabite were by consent of parties duly taken, signed, and sworn to before me at the times and places therein mentioned.

Given under my hand this 5th day of September, 1890.

JNO. G. HAYTHE,
Notary Public.

Notary's fee, $13.12, paid by defendant.

217 9, 20, 1890.

Certified Copy of File-Wrapper and Content-. Filed Sept. 20, 1890.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the files of this office of the file-wrapper and contents and a photo-lithographic copy of the drawings in the matter of the abandoned application filed by Demetrius B. Strouse September 27th, 1883, serial No. 107,587, for improvement in wrapping devices for cigarette machines.

United States of America. (Seal.) Patent Office.

In testimony whereof I, C. E. Mitchell, Commissioner of Patents, have caused the seal of the Patent Office to be affixed this 18th day of September, in the year of our Lord one thousand eight hundred and ninety, and of the Independence of the United States the one hundred and fifteenth.

C. E. MITCHELL,
Commissioner.

Petition.

To the Commissioner of Patents:

Your petitioner, Debetrious B. Strouse, a citizen of the United States, at present residing at Salem, county of Roanoke and State

of Virginia, prays that letters patent may be granted to him for the improvement in wrapping devices for cigarette machines set forth in the annexed specification, and he hereby appoints O. D. Munn and A. E. Beach, of the firm of Munn & Co., of the cities of New York and Washington, or their accredited agents, to act as his attorneys in prosecuting this application, with full power of substitution and revocation, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office therewith connected.

DEMETRIUS BITTLE STROUSE.

To all whom it may concern:

Be it known that I, Demetrius B. Strouse, of Salem, in the county of Roanoke and State of Virginia, have invented a new and useful improvement in wrapping devices for cigarette machines, of which the following is a full, clear, and exact description, reference being had to the annexed drawings forming part of this specification.

This invention relates to an improvement on the paper-wrapping device shown in letters patent No. 258,640, granted to James A. Bonsack under date of March 8, 1881. In the cigarette machine shown*ed* in the above-named patent the device for wrapping
218 the continuous strip of paper around the continuous roll of tobacco comprises a trough having curved edges, a wrapping tube having a spiral guide groove, and an endless belt passing through the trough and tube. The curved edges of the trough and the groove of the tube are adapted to roll up the belt and the strip of paper, which the belt carries, in such manner that one edge of the strip of paper shall be lapped over the other for securing the same around the tobacco roll. My present

More than one slit.

invention consists in a tapering wrapping tube having one or more slits for allowing the edges of the strip of paper (which strip is wider than the internal circumferenc of the tube at its smallest part) to escape or project outwardly therefrom to prevent the paper from being crowded and crumpled in the act of bringing its edges together around the roll of tobacco, as hereinafter described and claimed.

In the drawings Fig. 1 is a plan view of the trough and wrapping tube, show-

Amendment March 13, 1884.

one form of

ing A my improvement, and Fig. 2 is a cross-section on line *x x* of Fig. 1. A indicates

Insert amendment B, filed Mar. 13, 1884.

the trough having inwardly curved edges for holding the edges of the belt and strip of paper, and B is the wrapping tube having the spiral guide groove *a* in its inner surface for taking up one edge of the strip from one side of the trough and guiding it outwardly while the other edge of the strip is rolled inwardly about the roll of tobacco and brought
219 under the first edge in position for being pasted thereto. The wrapping tube B is provided with a slit, *b*,

at one side thereof

Amended Ap'l 25, 1884.

beginning at its larger end A at a point opposite to the groove *a* and in position for allow-

ing the edge of the strip of paper opposite to that in the groove to project outwardly through the same, *a*, as it leaves the trough A. The slit *b* extends spirally across the tube B towards the groove *a* and ends at *c*, at or near the top of the tube, just under or at the foot of the bead forming the groove. That portion, C, of the tube B between the groove *a* and slit *b* is turned slightly inwards towards the [slit]* center of the tube of paper A in order that the edge of the strip A projecting through the slit may be allowed to assume the proper curve for bringing it smoothly under the opposite edge as soon as said edges are in position for being pasted together.

Amendment Ap'l 25, 1884.

Amendment Ap'l 25, 1884.

Instead of using the guide groove *a*, I may use another slit like the slit *b*, arranged in the position of the groove. The advantages of the slit over the groove are that the strip of paper is kept smooth in the act of wrapping it around the roll of tobacco, and in case the roll of tobacco should choke up the tube, the latter may be easily cleaned out by inserting an instrument through the slit or slits without the necessity of detaching the tube from the machine for that purpose.

Dif. in. Insert amendment C, filed March 13, 1884. In an advantage it should be claimed.

What I claim is:

Erase and insert amend. C, filed March 27, 1884.

1. The wrapping tube having the spiral guide groove and the slit converging towards each other, 220 substantially as shown and described.

2. The wrapping tube having the spiral guide groove and the slit beginning at a point opposite to the beginning of the groove and verging towards and ending under the groove near the end of the latter, and having the portions forming the edges of the slit bent out of the normal curve of the tube, substantially as shown and described.

Erase and insert amendment B, filed Mar. 13, 1884. Insert amendment A, filed Feb'y 6, 1884. Alternative.

3. The wrapping tube having one or more slits for allowing the edge or edges of the strip of paper to escape or project therefrom, substantially as and for the purpose specified.

DEMETRIUS BITTLE STROUSE.

Witnesses:
A. G. LYNE.
SOLON C. KEMON.

* Words enclosed in brackets erased in copy.
Words and sentences enclosed between rules erased in copy.

COUNTY OF WASHINGTON, } ss:
Dist. of Columbia, }

D. B. Strouse, the above-named petitioner, a citizen of the United States and a resident of Salem, Roanoke Co., Virginia, being duly sworn, deposes and says that he verily believes himself to be the original and first inventor of the improvement in wrapping devices for cigarette machines described and claimed in the foregoing specification; that the same has not been patented to him or to others, with his knowledge or consent, in any country; that the same has not, to his knowledge, been in public use or on sale in the United States for more than two years prior to this application, and he does not know and does not believe that the same was ever known or used prior to his invention thereof.

DEMETRIUS BITTLE STROUSE.

Sworn to and subscribed before me this 21st day of September, 1883.

MCH. P. CALLAN,
[L. S.] *Notary Public.*

Room No. 96.

U. DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFCE,
WASHINGTON, D. C., *Jan. 30th*, 1884.

D. B. Strouse, care Munn & Co., present.

Subjest: Cigarette Machine. Filed Sept. 27, '83. No. 107,587.

221 & 222 Claim 3 refers to "one or more slits." This is not understood, as it is not known how more than one could be used. This claim is met in patent No. 231,947, to O. W. Allison, Sept. 7th, 1880 ("cigar machine"). Said claim is rejected.

WM. H. BLODGETT, *Examiner.*

W. I. C.

Examiner's room 96. Serial number, 107,587.

To the Commissioner of Patents:

In the matter of my application for letters patent for improvement in cigarette machs., filed Sept. 27, 1883, I hereby amend my specification as follows:

In claim 3, line 2, after "slits," insert:

A. "beginning at its larger end and extending spirally across the same."

D. B. STROUSE,
By MUNN & CO., *Att'y-.*

Feb'y 5, 1884.

Words and sentences enclosed between rules erased in copy.

It is stated in the specification that where two slits are used one of them will take the place of the spiral gro-ve, producing the same effect as the latter. The reference does not appear to show what could be called a tube, but a scroll instead; hence not a slitted tube.

Very respectfully, MUNN & CO.

Room 96.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Feb'y* 12, 1884.

D. B. Strouse, care Munn & Co., present.

Subject: Cigarette-making device. Filed Sept. 27, '83. No. 107,587.

Claim 3 refers to "one or more slits." It is not understood how more than — slit could be used, and no such device is shown by the drawings, and what is claimed must be shown; but this claim is to an alternative device and cannot be considered in this application. The description of two slits should be omitted, as it is neither understood nor considered a modification of the invention *of the invention* here shown and claimed.

This claim is refused.

WM. H. BLODGETT, *Examiner.*

W. I. C.

223 Examiner's room 96. Serial number, 107,587.

To the Commissioner of Patents:

In the matter of my application for letters patent for a cigarette wrapping tube, filed Sept. 25, 1883, I hereby amend my specification as follows:

Page 3, line 8, after "showing," insert "one form of."

Page 3, line 12, after "1," insert:

B. Fig. 3 is a plan view of the wrapping tube showing the same made with two slits instead of one, and Figs. 4, 5, & 6 are cross-sections of the same on lines x' x' y y z z, respectively.

Page 5, line 11, after "gro-ve," insert:

Erase and insert amendment F, filed Ap'l 25, 1884. C.	"As shown in Fig. 3. In such case the tube is formed of two parts connected together as shown."

Words and sentences enclosed between rules erased in copy.

Cancel claim 3 and substitute:

"3. The cigarette wrapping tube having continuous spaces or openings provided in its longitudinal walls for allowing the edges of the strip of paper to escape or project therefrom to prevent crowding or crompling the same, which spaces or openings are made to converge towards each other to bring the edges of the paper together, substantially as shown and described."

Erased per amendment filed Mar. 27, 1884. D.

DEMETRIUS B. ST-OUSE,
By MUNN & CO., *Att'ys.*

MARCH 12, '84.

The tube having two slits has been illustrated in the drawing as required, and claim 3 as amended covers both forms generically. A favorable action is requested.

Very respectfully, MUNN & CO.

224 Room No. 96.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Mar. 18th*, 1884.

D. B. Strouse, care Munn & Co., present.

Subject: Wrapping device. Filed Sept. 27, 1883. No. 107,587.

Claims 1 and 3 are to two different and distinct species, both of which cannot be allowed. Applicant is in error in the remark that the examiner required a view of a tube having two slits.

WM. H. BLODGETT, *Examiner.*

W. I. C.

Examiner's room 96. Serial number, 107,587.

To the Commissioner of Patents:

In the matter of my application for letters patent for a cigarette wrapping tube, filed Sept. 25, 1883, I hereby amend my specification as follows:

Cancel the claims and substitute:

"1. The cigarette wrapping tube having a continuous longitudinal slit in its wall for allowing one edge of the strip of wrapping paper to escape or project therefrom to prevent crumpling the same, substantially as shown and described.

"2. The cigarette wrapping tube having the continuous longitudinal slits in its wall

Erased & insert amendment G, filed Apr. 25, 1884.

Words and sentences enclosed between rules erased in copy.

E. converging towards each other for allowing the edges of the strip of wrapping paper to escape or project therefrom to prevent crumpling the same, substantially as shown and described.

D. B. STROUSE,
By —— ——, *Att'eys.*

M'CH 26, '84.

In reply to the last letter we would refer the examiner to his letter of the 12th of Feb'y, in which he states that "what is claimed must be shown." As the applicant insists upon his claim covering the tube having two slits, as originally described and claimed in the specification, it is evident that the new figure was necessary, and the only question is whether both tubes may be comprehended under a single claim. We attempted to present a generic claim, covering both tubes, by our last amendment, and, as it failed to give satisfaction, we have made another attempt in the above amendment. It will be observed that claim 1 covers the essential feature—a slit—and is equally applicable to both tubes.

Claim 2 covers a special construction, in which the slit is duplicated, and the two slits are made to converge towards each
225 other. This seems to be only a modification of the tube having one slit, and we think it is properly claimed in the same application with the latter.

Very respectfully, MUNN & CO.

Room No. 96.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Apr.* 21*st*, 1884.

D. B. Strouse, care Munn & Co., present.

Subject: Cigarette machine. No. 107,587. Filed Sept. 27, 1883.

Claim 1 is to a tube having a slot in its wall. It is met in patent to Allison, before cited, and 238,640, to J. A. Bonsack, Mar. 8, 1881 ("cigar machines, continuous filler").

Claim 2 is objected to, as it fails to include sufficient means to constitute an operative device. The two slots *per se* would not prevent crumpling of the paper. The claims should be carefully drawn to this structure, pointing out all the parts that constitutes it.

The claims are rejected.

WM. H. BLODGETT, *Ex'r.*

W. I. COLLAMER, *Ass't Ex'r.*

Words and sentences enclosed between rules erased in copy.

96. Examiner's room 96. Serial number, 107,587.

To the Commissioner of Patents:

In the matter of my application for letters patent for a cigarette wrapping tube, filed Sept. 25, 1883, I hereby amend my specification as follows:

Page 4, line 5, before "at" insert "at one side thereof."

Page 4, line 16, after "*c*" insert "at or near the top of the tube."

Page 4, line 23, cancel "slits," before "in order," and substitute "center of the tube."

Page 5, line 11, cancel the amendment inserted after "groove" and substitute:

F. "as shown in Fig. 3. In such cases the part C is made separate from the bottom or main part of the tube, and is set inward, with both of its edges within and projecting below the edges of the main part, so that each shall conform to the position of the edge of the part C, in Fig. 2, and the separate part C is connected to the main part by outside bands or connecting strips, as shown.

Cancel the claims and substitute:

G. 226 "1. A cigarette wrapping tube having a central section provided with a continuous longitudinal slit in its wall and one edge of said slit set slightly inward towards the center of the tube to allow one edge of the strip of wrapping paper to escape or project therefrom to prevent

& a guide for accommodating the other edge of the strip

crumpling the paper, substantially as shown and described.

"2. A cigarette central section provided with a wrapping tube having a continuous longitudinal slit in its wall, beginning at one side thereof and running spirally to receive and guide one edge of the paper to its upper part, and having the upper edge of said slit set slightly inwards towards the center of

and having means for guiding the other edge of the paper

G. the tube, substantially as shown and described.

"3. A cigarette wrapping tube having a continuous longitudinal slit beginning at each of two opposite sides of its wall, said slits running spirally and converging towards each other and having the upper edges thereof set slightly inward towards the center of the tube, form guide- and a to allow the edges of the strip of wrapping paper to escape or project therefrom, substantially as shown and described.

"4. A cigarette wrapping tube formed with a part, C, arranged within the main part, and which is set with its edges inclined inward from the wall of the main part to form slits

b, through which the edges of the strip of wrapping paper may project to prevent crumpling the paper, substantially as shown and described."

DEMETRIUS B. STROUSE,
By MUNN & CO., *Att'ys.*

Apr. 24, '84.

227 We herewith file the model as an exhibit in this case, and more particularly because it is difficult to illustrate such a device properly in a drawing. It is thought the model should be made a part of the record of the case. If the model ought to show both forms of the invention, an additional model showing the other form will be procured. We request that the model may be filed.

Very respectfully, MUNN & CO.

WASHINGTON, D. C., *25th April*, 1884.

To the Hon. Commissioner of Patents.

SIR: Please furnish my attorney, Charles T. Moore, Esqr., with a copy of the specifications & claims & drawings of my application for a patent for improvement on cigarette machines, the application having been made by Mess. Munn & Co. as my att'ys.

Y'rs truly, D. B. STROUSE.

Room No. 96.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *May 14th*, 1884.

D. B. Strouse, care Munn & Co., present.

Subject: Cigarette machine. Filed Sept. 27, 1883. No. 107,587.

Amendment "F," filed Apr. 25, 1884, describes a device which the new figs. upon the drawings show, and claim 4 is based thereon. Guide slots were described in the original specification, but not this device, and in order to represent the slots upon the drawings it seems that it became necessary that this device, as an essential part thereof, should be shown. It is necessary, however, that a supplemental oath under rule 47 be furnished, accompanying said amendment and claim, and upon the same sheet of paper.

WM. H. BLODGETT, *Examiner.*

W. I. COLLAMER, *Ass't Ex'r.*

Room No. 96.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *June* 13, 1884.

D. B. Strouse, care Munn & Co., present.

Subject: Cigarette machine. No. 107,587. Filed Sept. 27, 1883.

This case should be amended within eight days from date
228 in view of a prospective interference.

WM. H. BLODGETT, *Examiner.*

W. I. COLLAMER, *Ass't Ex'r.*

To the Commissioner of Patents:

The undersigned, having, on or about the 23rd day of September, 1883, ser'l No. 107,587, made application for letters patent for an improvement in folding tubes for cigarette machines, hereby appoints Charles T. Moore, of Washington, D. C., his attorney, with full power of substitution and revocation, to prosecute said application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office connected therewith; and I hereby revoke all previous powers of attorney given by me whatsoever relating to said application.

Signed at Lynchburg, Va., Jan'y 28, '85.

D. B. STROUSE,
By C. A. KRISE, *Att'y.*

Serial No. 107,587.
1883. Ex'r Book No. $\frac{55}{556}$.
Patent No. ——.

Demetrius Bittle Strouse,
Of Salem,
County of Roanoke,
State of Virginia.

Invention, wrapping devices for cigarette machines.

Parts of application filed.
- Petition, Sept. 25, 1883.
- Affidavit, " " "
- Specification, " " "
- Drawing, " 27 "
- Model " " "
- Specimen, ——.
- First fee cash, $15, Sept. 25, 1883.
- " " cert., ——.

App. filed complete, Sept. 27, '83.
Examined.
Countersigned. —— ——, for Commissioner.
Notice of allowance, 188–.
Final fee cash, 188–.
" " cert., 188–.
Patented, 188–.
Att'y or P. O. address, Munn & Co., present.
Chas. T. Moore, Corcoran building, room 104, city.

1883.

Contents.

Application papers.
1. Jan. 30, 1884, rej.
2. Feb. 16, 1884, amend't A.
3. Feb. 12, 1884, rej.
4. March 13, 1884, amend't B, C, D.

229 5. Mar. 18, 1884, letter.

6. Mar. 27, 1884, amend't E.
7. Apr. 21, 1884, rejection.
8. Apr. 25, 1884, amend't F, G.

No. 1195.
Pollard
v.
Bonsack
Machine Co

p. 230

fig. 1.

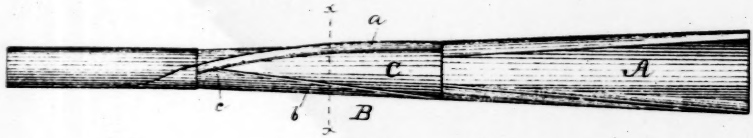


fig. 2.



fig. 3.



fig. 4.



fig. 5.



fig. 6.



WITNESSES:
H. B. Brown
A. G. Lyne.

INVENTOR:
D. B. Strouse
BY Munn & Co
ATTORNEYS.

9. May 14, 1884, letter.
10. June 13, 1884, letter.
11. Jan. 31, 1885, rev. of power of att'y.
12.
13.
14.
15.
16.
17.
18.
19.
20.

Title: Improvement in —.
131. Tobacco cigar machines, continuous filler.
E. C. C., E. J.

(Here follows diagram marked page 230.)

231 *Opinion of the Court. Filed February 4th,* 1891.

In the Circuit Court of the United States for Western District of Virginia. In Equity.

E. T. POLLARD
vs.
BONSACK MACHINE CO.

This is a suit brought to restrain the defendant company from the use of a machine for the manufactory of cigarettes, for which the complainant claims to have a patent. The papers are voluminous, and the depositions embrace the statements of every one likely to know anything about the subject-matter of the suit.

That we think it is unnecessary to go into any investigation as to the patentability of the complainant's machine or to determine whether or not the machine he claims was not a mere substitute of mechanical equivalents for such as he found in the machine used by the defendants while he was in their employ, for it abundantly appears from the testimony that the Bonsack Company had a patented machine in use some time prior to the 25th of June, 1883. This machine was defective, and parties using it by license of the Bonsack Co. threatened to displace it because it did not accomplish in a satisfactory manner the making of marketable cigarettes.

The Bonsack Company, alarmed at this, sought to employ a skilled mechanic who by his ingenuity and mechanical knowledge would be able so to adjust and improve their machine as to make it serve its purpose.

They applied to Robert Thurman, a machinist of Lynchburg, who, having too much work of his own to do, recommended to them Pollard, the complainant. He agreed to exercise his skill upon the Bonsack machine for seventy-five dollars per month, the Bonsack Company to pay all his traveling expenses and the costs of the tools

and material used in his experiments and the rent of a shop in which to work. This the company did, and whatever patent Pollard now has and which he claims is infringed by defendants he acquired by these experiments at the expense of the company while employed by it for the express purpose of making them. We cannot see how this case varies in any respect from the case of McClurg *vs.* Kingsland, 1 Howard, 202, recently quoted with approval in the case of A. S. Solomons *vs.* The United States, not yet decided, at October term, 1890 (December 8th, 1890), by the Supreme Court of the United States.

The complainant was employed to use his skill and mechanical talent to perfect defendant's machine upon stipulated terms. There can be no question he had a right to sell his inventive powers to whomsoever he pleased. From the testimony we think he devoted them to the use of the defendant company and cannot now be heard to prevent it from using what is the result of his undertaking for which it paid him, which is all defendant claims to do.

We think the bill should be dismissed, and a decree will be signed accordingly.

H. L. BOND.

Final Decree. Filed February 16th, 1891.

In the Circuit Court of the United States for West. District of Va., at Lynchburg. In Equity.

E. T. POLLARD, Complainant,
vs.
BONSACK MACHINE COMPANY, Defendant.

This cause having come on to be heard at the September term, 1890, of this court on bill of complaint herein and answer of defendant thereto and proofs for final hearing on behalf of the respective parties duly taken and filed herein, and the said cause having been fully argued by counsel for the respective parties on the
232 19th and 20th days of September, 1890, William D. Baldwin and J. H. Webb Peploe, for the complainant, and Robert H. Duncan and A. H. Burroughs, for the defendant, appearing and making oral arguments, and counsel thereafter having filed two printed briefs in behalf of the complainant and two in behalf of the defendant, and the court having considered the cause upon its merits and having prepared and filed its opinion thereon—

Now, therefore, on motion of A. H. Burroughs, solicitor for defendant, it is hereby ordered, adjudged, and decreed that the complainant's said bill of complaint be, and the same hereby is, dismissed with costs to the defendant, to be taxed.

HUGH L. BOND,
Circuit Judge.

Dated February 14th, 1891.

UNITED STATES OF AMERICA,
Western District of Virginia, } *ss:*

I, Wyatt M. Elliott, clerk of the circuit court of the United States for the western district of Virginia, at Lynchburg, do hereby certify that the foregoing is a true transcript from the records and proceedings (excepting the formal process, formal orders at rules, and continuances at terms, and stipulations for publication of depositions) in a certain chancery suit lately depending in said court in which E. T. Pollard is plaintiff and The Bonsack Machine Company is defendant, with all things touching the same, as fully and wholly as they now exist among the records of my office.

Seal United States Circuit Court, Western District Virginia.

In testimony whereof I hereto set my hand and annex the seal of the said court this 30th day of April, 1891.

WYATT M. ELLIOTT, *Clerk.*

Fee, $162.60, paid by E. T. Pollard.

233 UNITED STATES OF AMERICA,
Western District of Virginia. }

In the clerk's of-ice of the circuit court of the United States for the western district of Virginia, at Lynchburg, in vacation, after the March, 1891, term of said court, to wit, on Tuesday, the 12th day of May, 1891.

The following decree was this day received in said office and entered of record, to wit:

Circuit Court of the United States, Western District of Virginia, at Lynchburg.

E. T. POLLARD, Complainant,
vs.
BONSACK MACHINE COMPANY, Defendant. } In Equity.

This cause came on to be heard at the September term, 1890, of this court and was argued by counsel; and thereupon, upon consideration thereof, it was ordered, adjudged, and decreed that the complainant's said bill of complaint be, and the same hereby is, dismissed with costs to the defendant, to be taxed.

And the costs having been taxed by the clerk at $212.24 (two hundred and twelve dollars and twenty-four cents)—

Wherefore let the said Bonsack Machine Company recover of said Edward T. Pollard the sum of two hundred and twelve dollars and twenty-four cents, the costs and charges as taxed.

HUGH L. BOND, *C't Judge.*

Teste: WYATT M. ELLIOTT, *Clerk.*

A true copy from the records.
Teste:
[Seal United States Circuit Court, Western District Virginia.]
WYATT M. ELLIOTT, *Clerk.*

234 UNITED STATES OF AMERICA, }
Western District of Virginia. }

In the clerk's office of the circuit court of the United States for the western district of Virginia, at Lynchburg, in vacation, after the March, 1891, term of said court, to wit, on Tuesday, the 12th day of May, 1891.

The following decree was this day received in said office and entered of record, to wit:

In the United States Circuit Court in and for the Western District of Virginia.

E. T. POLLARD
vs.
BONSACK MACHINE COMPANY. } In Equity.

And now comes the complainant and prays that an appeal may be allowed him to the Supreme Court of the United States from the final decree heretofore entered dismissing his bill of complaint, and in consideration of the premises the court allows the appeal and fixes the amount of the bond to be given by the complainant at two hundred and fifty dollars.

HUGH L. BOND, *C't Judge.*

Teste: WYATT M. ELLIOTT, *Clerk.*

A true copy from the records.
Teste:

[Seal United States Circuit Court, Western District Virginia.]

WYATT M. ELLIOTT, *Clerk.*

235 UNITED STATES OF AMERICA, }
Western District of Virginia. }

In the clerk's office of the circuit court of the United States for the western district of Virginia, at Lynchburg, in vacation, after the March, 1891, term of said court, to wit, on Tuesday, the 12th day of May, 1891.

The following bond was this day received in said office and filed, to wit:

Circuit Court of the United States, Western District of Virginia.

EDWARD T. POLLARD, Complainant,
vs.
THE BONSACK MACHINE COMPANY, Defendant. } In Equity.

Know all men by these presents that we, Edward T. Pollard, as principal, and James L. Murrill, as surety, the latter of the city of Baltimore, State of Maryland, are held and firmly bound unto the above-named Bonsack Machine Company in the sum of two hundred and fifty dollars, to be paid to the said Bonsack Machine Com-

pany; for the payment of which, well and truly to be made, we bind ourselves and each of us, our and each of our heirs, executors, and administrators, jointly and severally, firmly by these presents.

Sealed with our seal- and dated the 9th day of May, in the year of our Lord one thousand eight hundred and ninety-one.

Whereas the above-named Edward T. Pollard has prosecuted an appeal to the Supreme Court of the United States to reverse the decree rendered in the above-entitled suit by the judge of the circuit court of the United States for the western district of Virginia:

Now, therefore, the condition of this obligation is such that if the above-named Edward T. Pollard shall prosecute said appeal to effect and answer all damages and costs if he fail to make said appeal good, then this obligation shall be void; otherwise the same shall be and remain in full force and virtue.

E. T. POLLARD. [L. S.]
JAS. L. MURRILL. [L. S.]

Sealed, delivered, taken, and acknowledged before me this 9th day of May, 1891.

——— ———.

Approved by—
HUGH L. BOND, *C't Judge.*

A true copy from the original.
Teste:

[Seal United States Circuit Court, Western District Virginia.]

WYATT M. ELLIOTT, *Clerk.*

236 UNITED STATES OF AMERICA, }
Western District of Virginia. }

In the clerk's office of the circuit court of the United States for the western district of Virginia, at Lynchburg, in vacation, after the March, 1891, term of said court, to wit, on Tuesday, the 12th day of May, 1891.

The following citation was this day received in said office, entered of record, and issued to the marshal of the western district of Virginia for execution, to wit:

UNITED STATES OF AMERICA, *ss:*

To The Bonsack Machine Company, Greeting:

You are hereby cited and admonished to be and appear at a Supreme Court of the United States, to be holden at Washington on the second Monday of October, eighteen hundred and ninety-one, pursuant to an appeal filed in the clerk's office of the circuit court of the United States for the western district of Virginia, at Lynchburg, wherein Edward T. Pollard is appellant and The Bonsack Machine Company is respondent, to show cause, if any there be, why the judgment in the said appeal mentioned should not be

corrected and speedy justice should not be done to the parties on that behalf.

Witness the Honorable Melville W. Fuller, Chief Justice of the United States, this 9th day of May, in the year of our Lord one thousand eight hundred and ninety-one.

HUGH L. BOND, *C't Judge.*

And at another day, to wit, on the 29th day of May, 1891, said citation was returned to said clerk's office and filed, with the following endorsement thereon, to wit:

"Executed by delivering a true copy of the within citation to D. B. Strouse, president of the Bonsack Machine Company, at Salem, Roanoke county, Virginia, he being the highest officer of said company in my district, and the principal office of the company being in the town of Salem, Roanoke county, Virginia, and the president being a resident of Salem, Roanoke county, Virginia. Executed this 26th day of May, 1891.

JOHN G. WATTS,
U. S. Marshal, West. District of Va.,
By J. W. MILLS, *Deputy.*"

A true copy from the records.
Teste:

[Seal United States Circuit Court, Western District Virginia.]

WYATT M. ELLIOTT, *Clerk.*

237 UNITED STATES OF AMERICA, }
Western District of Virginia. }

CLERK'S OFFICE, U. S. CIRCUIT COURT,
WESTERN DISTRICT OF VIRGINIA, LYNCHBURG, VA.

I, Wyatt M. Elliott, clerk of the circuit court of the United States for the western district of Virginia, which holds its sessions at the city of Lynchburg, in said western district, do hereby certify that the papers of which the foregoing are duly attested copies were received in said clerk's office subsequently to the completion of the record heretofore prepared and furnished in this cause.

I further certify that the foregoing, together with the record heretofore furnished, is a true transcript of the record and proceedings in a certain chancery suit commenced in said circuit court by Edward T. Pollard against The Bonsack Machine Company, with all things touching the same, as fully and wholly as they now exist among the records of my office.

In testimony whereof I hereto set my hand and affix the seal of said court, at the clerk's office, in the city of Lynchburg, in said western district of Virginia, this 1st day of June, A. D. 1891.

[Seal United States Circuit Court, Western District Virginia.]

WYATT M. ELLIOTT, *Clerk.*

238 United States Circuit Court, Western District of Virginia.

EDWARD T. POLLARD
vs.
BONSACK MACHINE COMPANY. } In Equity.

And now comes complainant and makes the following assignment of errors in the matter of the appeal to the Supreme Court of the United States allowed from the decision of this honorable court in the above-entitled cause, viz:

The court erred—

1. In holding that whatever patent Pollard now has and which he claims is infringed by defendants he acquired by experiments at the expense of the company while employed by it for the express purpose of making them.

2. In deciding this cause against complainant on the authority of McClurg *vs.* Kingsland and of Solomon *vs.* The United States.

3. In holding that appellant devoted and sold his inventive powers to the use of the defendant company and cannot now be heard to prevent it from using what is the result of his undertaking for which it paid him, which is all defendant claims to do.

4. In dismissing the bill for the causes assigned or for any other cause.

WM. D. BALDWIN,
Of Counsel for Complainant.

[Endorsed:] Sup. Court U. S., Oct'r term, 1891. No. 1195. E. T. Pollard, app't, *vs.* The Bonsack Machine Co. Assignment of errors. Filed July 14, 1891.

Endorsed on cover: Virginia, western district, C. C. U. S. No. 1195. E. T. Pollard, appellant, *vs.* The Bonsack Machine Company. Filed June 2, 1891.